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ABSTRACT

Provided in this document is an alphabetical listing of colleges and universities in the United States (by state) and Canada (Alberta and Ontario) offering classes and/or a curriculum in environmental interpretation. Detailed descriptions of these classes and/or curricula and a bibliography of course textbooks are also provided. In addition, descriptions of interpretative facilities (if any) are included. The document is designed to aid: interpretation students in selecting an appropriate school; school counselors in guiding their students; interpretation educators in becoming more aware of course content and techniques used by their colleagues; and professional interpreters in locating nearby resource personnel. (JN)

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Location of Colleges and Universities

Listed in this Directory

Offering Instruction in Interpretation

AUTHOR'S NOTE

Many attempts were made to contact all schools offering instruction in interpretation. However, as this work is a first attempt to create an all-inclusive directory of interpretive curricula, no single list of all such institutions was available. Therefore, some omissions may have been made inadvertently. The author sincerely regrets any such oversights, and would appreciate being notified of any errors or ommisions. Future updates of this directory may be made in order to keep this information current.

The author feels that while this directory may not represent all institutions offering instruction in interpretation, it does represent a high precentage of those schools. Thus, it presents a representative sample of interpretive instruction offered in the United States and Canada.

Lawrence A. Hartmann

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ACKNOWLEDGEMENTS

This directory could not have been completed without the help of many individuals. The author would like to thank the many interpretive educators who gave their time to respond to my inquiries. Dr. John W. Hanna was instrumental in providing assistance and encouragement during the conceptualization stage. Ms Marty Giles, Ms Gail Vander Stoep, and Mr. William Hobson are thanked for their valuable review and editorial comments, and Mr. Donald B.K. English for his careful profreading. Drs. Joseph Fridgen and Paul Risk provided valuable assistance during the Master's project which was the original seed of this directory. Dr. H. Ken Cordell gave constant encouragement during the final phases of this project. The Department of Recreation and Parks at Texas A&M University and the USDA Forest Service Southeastern Forest Experiment Station's Forestry Sciences Lab in Athens, Georgia, are also gratefully acknowledged for the use of their word processing equipment.

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PURPOSE

The purposes of this document are to provide a listing of all colleges and universities in the United States and Canada that offer classes or a curriculum in interpretation, and to describe these courses and curricula in detail. This document is designed to be of use to many individuals:

1) students of interpretation may be better able to select an appropriate school,

2) school counselors may be better able to guide their students,

3) educators in interpretation may be more aware of course content and techniques used by their colleagues, and

4) professional interpreters may be better able to locate nearby resource personnel.

METHODS

A six-step process was used in gathering the information presented in this directory.

First, an initial working list of schools was compiled using four existing works:

Bachert, Russel E., Jr. 1977. Directory of Outdoor Education Degree Programs in Higher Education. ERIC/CRESS. Las Cruces, New Mexico.

Hartmann, Lawrence A. 1980. Interpretive Training: A National Survey of Colleges and Universities. unpublished Master's Plan B paper, Michigan State University, Dept. of Park and Recreation Resources, East Lansing, Michigan.

Propst, Dennis B. (in press). "Colleges and Universities Offering Coursework in Interpretation," A Guide to Cultural and Environmental Interpretation in the U.S. Army Corps of Engineers, Instructional Report R-81-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

Williams, Larry, and Donald Henkle. 1981-82. Curriculum Catalog. Society of Park and Recreation Educators, National Recreation and Parks Association.

In addition to these four sources, the Association of Interpretive Naturalists (AIN) and the Western Interpreters Association (WIA) were contacted to obtain listings of their university members.

Second, after the working list had been updated with the AIN and WIA contributions, professional interpretation educators were consulted to spot any omissions. Their suggestions were incorporated into a final mailing list for survey purposes.

Third, interpretation educators at the institutions listed were contacted by mail survey during the spring and summer of 1982. Follow up letters were sent, and in some cases, personal telephone calls were made to encourage response.

Fourth, after all known schools offering interpretation courses had been contacted, a notice was placed in the AIN and WIA national newsletters and in Interpretation Central's newsletter requesting representatives from any omitted schools to contact the author. All information submitted was incorporated into the directory.

Fifth, all information obtained by the above process was compiled into a standard format.

Finally, in February 1983, respondents were sent photostatic copies of the information presented on their schools, as it appeared in the first draft of this directory. All returned corrections were incorporated into the final draft.

Directory listings for individual schools may vary slightly in format. Each listing reflects information returned by that schools. Every attempt was made to include all pertinent information submitted by respondents. Editorial changes were made to assist format consistency.

BIBLIOGRAPHY OF COURSE TEXTS

A variety of course texts were reported by survey respondents. Below is a bibliography of these texts. Numbers in parenthesis at the end of each listing indicate the number of schools currently using each work as a course text. Nearly all courses listed in the directory require more than one text. (Each directory listing indicates contains only authors' names for texts used.)

Alberta Recreation and Parks. Interpretive Resource Planning Manual. (1)

Alderidge, D. 1975. Guide to Countryside Interpretation: Part One. Edinburgh: HMSO. (1)

Alderson, William P., and Low, Shirley P. 1976. Interpretation of Historic Sites. Nashville: American Association of State and Local History. 189pp. (5)

Alexander, Edward P. 1978. Museums in Motion. Nashville: American Association of State and Local History. 308 pp. (2)

Ashbaugh, B.L. (a) 1973. Planning a Nature Center. New York: National Audubon Society. 88pp. (1)

Ashbaugh, B.L., et. al. (b) 1971. Trail Planning and Layout. New York: National Audubon Society. 75pp. (1)

Baskin, John. 1976. New Burlington: The Life and Death of an American Village. New York: Plume. 259pp. (1)

Bellison, Larry; Hawks, Kurt; Pulsipher, Gerald. 1978. Getting Your Message Across. Concept Design Assoc., Inc. (1)

Book, C. 1980. Human Communication. New York: St. Martens Press. (1)

Borrow, Donald J. and Richard E. White. 1970. A Field Guide to the Insects. Boston: Houghton Mifflin Comapny. 362pp. (1)

Bowman and Coon. Environmental Education in the Urban Setting: Rationale and Teaching Activities. (1)

Brown, William E. 1971. Islands of Hope. Washington, D.C.: National Recreation and Parks Association. (1)

Burcaw, G. Ellis. 1975. Introduction to Museum Work. Nashville: American Association of State and Local History (1).

Carr, Archie. 1979. The Windward Road: Adventures of a Naturalist on Remote Carribean Shores. U. Presses Florida. (1).

Cherem, Gabriel. Highbanks. (1)

Columbe, Worth, Mawson, and Artz. Through the Looking Glass. (1)

Columbus Metro Parks. Nature Interpretation Handbook. (1)

Combstock, A.B. Handbook of Nature Study. (1)

Cornell, Joseph B. 1979. Sharing Nature With Children. Nevada City, California: Aranda. 143pp. (5)

Cox, D.A., and Stapp, W.B. 1979. Environmental Education Activities Manual. (1)

Deetz, James. 1977. In Small Things Forgotten. Garden City: Anchor/ Doubleday. (1)

Dubos, Rene. 1973. A God Within. New York: Scribners. (1)

Edwards, Yorke. 1980. The Land Speaks. Toronto: National and Provincial Parks Association of Canada. (1)

Eiseley, Loren. 1978. The Star Thrower. New York: Harvest/HBJ. (1)

Elzinga, Richard J. 1981. Fundamentals of Entomology. Englewood Cliffs, New Jersey: Prentice-Hall, Inc. (1)

Fazio, James K. 1976. Nature Trails: Guides to Environmental Understanding. Ithica, NY: Cooperative Extension, 4-H Leaflet L-5-4, Cornell University. (1)

Fazio, James K., and Douglas Gilbert. 1982. Public Relations and Communications for Natural Resource Managers. Dubuque, Iowa: Kendall Hunt. 375pp. (4)

Ford, Phyllis M. 1981. Principles and Practices of Outdoor/Environmental Education. New York: John Wiley and Sons. (3)

Gino, Jean. The Man Who Planted Hope and Grew Happiness. (1)

Grater, Russel K. 1976. The Interpreter's Handbook. Globe, Arizona: Southwest Parks and Mounments Association. (3).

Hammerman, D.R. and W.M. Hammerman. 1973. Teaching in the Outdoors. Minneapolis, MN: Burgess Publishing. (1).

Hanna, John W. Interpretive Skills for Environmental Communicators. (6)

Harlow, William M. (a) 1959. Fruit Key and Twig Key to Twigs and Shrubs. New York: Dover Publications. (2)

Harlow, William M. (b) 1957. Trees of Eastern and Central United States and Canada. New York: Dover Publications, Inc. 276pp. (2).

Hillcourt, William. 1978. Field Book of Nature Activities and Hobbies. New York: Putnam, G.P., and Sons. (1)

Houston, David R. 1979. Understanding the Game of the Environment. United States Department of Agriculture, Agricultural Information Bulletin No. 426. 155 pp. (1)

Hudspeth, Thomas R. 1982. Readings in Environmental Interpretation. Burlington, VT: UVM Environmental Program. (1)

Huth, Hans. 1972. Nature and the American. Lincoln: University of Nebraska Press. (1).

Kodak (a) 1975. Planning and Producing Slide Programs (S-30). Rochester, New York: Eastman Kodak Company. (4)

Kodak (b) 1977. Kodak Sourcebook: Kodak Ectagraphic Slide Projectors (S-74). Rochester, NY: Eastman Kodak Co. (1)

Lafferty, Michael B. (ed.) 1979. Ohio's Natural Heritage. Columbus: Ohio Academy of Natural Science. (1)

Leopold, Aldo. 1974. A Sand County Almanac. New York: Sierra Club/ Ballantine Books. (4)

Lewis, William J. 1980. Interpreting for Park Visitors. Eastern National Park and Monument Association, Phildelphia: Eastern Acorn Press. 159pp. (6)

Link, M. 1978. Nature's Classroom - A Manual for Teaching Outdoor Education. New York: National Audubon Society. (1)

Magar. Preparing Instructional Objectives. (1)

Manly, R.J. 1977. Guidelines for Interpretive Building Design. New York: National Audubon Society. (2)

Marsh, John S. 1981. Winter, Recreation, and Interpretation. Proceedings of a workshop held at Irwin Inn, Story Lake, Ontario Canada, Jan. 30 - Feb. 1, 1981. Peterborough: Interpretation Canada. (1)

McInnis, Noel, and Don Albrecht. 1975. What Makes Education Environmental. Louisville, KY: Data Courier Environmental Educator Inc. (1)

McLuhan, T.C. 1976. Touch the Earth: A Self Portrait of Indian Existance. Austin, Texas: S&S Press. (1)

Michener, James A. 1974. Centennial. Greenwich: Fawcett Crest 1086pp. (1)

Nash, Roderick. 1982. Wilderness and the American Mind. 3rd edition. New Haven: Yale University Press. (2).

Neal, Arminta. 1976. Exhibits for the Small Museum: A Handbook. Nashville: American Association for State and Local History. (2)

Newcomb, Lawrence. 1977. Newcomb's Wildflower Guide. Boston: Little, Brown and Company. (1)

Odiorne Point Natural Science and Historical Studies. (1)

Pasquier, Roger. 1977. Watching Birds. Boston: Houghton Mifflin Company. (1)

Peterson, Roger Tory. 1977. A Field Guide to the Birds (of Eastern and Central North America). Boston: Houghton Mifflin Company. (1)

Propst, Dennis, and Joe Roggenbuck. 1981. A Guide to Cultural and Environmental Interpretation in the U.S Army Corps of Engineers. OCE, U.S. Army, Washington D.C. (1)

Ricklefs, Robert E. 1976. The Economy of Nature. New York: Chiron Press. (1)

Ryan, William. 1976. Blaming ther Victim. New York: Random House. (1)

Screven, C.G. 1974. Measurement and Factors of Learning in the Museum Environment. Washington, D.C.: Smithsonian Institution Press. (1)

Shaara, Michael. 1975. The Killer Angels. New York: Ballantine Books. (1)

Sharpe, Grant W. (ed.) 1982. Interpreting the Environment. 2nd. edition New York: John Wiley and Sons. (61)

Shoman, J.J.; Ashbaugh, B.L.; Tolman, C.O. 1974. Wildlife Habitat Improvement. New York: National Audubon Society. (1)

Stokes, D.W. A Guide to Nature In Winter. (1)

Storer, John. 1949. The Web of Life. New York, NY: Signet Book, New American Library. 128 pp. (1)

Streuver, Stuart; Holton, Felicia A. 1980. Koster. New York: Signet. (1)

Swan, Malcolm D. 1970. Tips and Tricks in Outdoor Education. Danville, IL: The Interstate Printers and Publishers, Inc. (1)

Tanner, R. Thomas. 1974. Ecology, Environment, and Education. Lincoln, NE: Professional Educators Publications, Inc. (1).

Tilden, Freeman. 1977. Interpreting Our Heritage. University of North Carolina Press, Chapel Hill, NC. (40)

Van Matre, Steve (a). 1972. Acclimitization: A Sensory and Conceptual Approach to Ecological Involvement. Martinsville, IN: American Camping Association. (5)

Van Matre, Steve (b). 1974. Acclimitizing: A Personal and Reflective Approach to a Natural Relationship. Martinsville, IN: American Camping Association. (1)

Van Meter, Steve. (c) 1979. Sunship Earth: An Acclimitization Program for Outdoor Learning. Martinsville, IN: American Camping Association. (1)

Watts, May T. 1975. Reading the Landscape of America. New York: Macmillan (1)

UNITED STATES SCHOOLS

AUBURN UNIVERSITY

James P. Drummond
Department of Recreation Administration
2080 Memorial Colliseum
Auburn University
Auburn, Alabama 36849
(205) 826-4483

Interpretive Curriculum

The B.S. degree in Recreation Administration is offered at Auburn University, which is on the quarter system. No interpretive curriculum per se exists. The Recreation Administration curriculum is outlined below.

General Education Requirements	79 hours
Basic Park Administration Core	64 hours
Recreation Program Leadership Option	30-32 hours
Recreation Resource Management Option	32 hours
Approved Electives	35-37 hours

Interpretive Course

Title: Recreation Interpretive Services
Hours: 3 quarter
Texts: Grater; Tilden.

Course Description:
This course presents an overview of the principles and applications of recreational interpretive services. It includes definitions, terminology, and methodology. This course is designed to develop student understanding of the meaning of interpretation and its role within the recreation setting; to study the principles and techniques of interpretation; to develop the ability to prepare and present an interpretive program. Approximately 15-20 students (5% sophomores, 20% juniors, 75% graduate students) majoring in Parks and Recreation (90%) and other subjects (10%), enroll in this course each quarter.

Course Requirements:
Two exams and several pop quizzes; readings; preparation of a 10-minute interpretive program.

UNIVERSITY OF ARIZONA

William W. Shaw
School of Renewable Natural Resources
University of Arizona
Bio. Sci. East 325
Tucson, AZ 85721
(602) 626-4587

Interpretive Curriculum

The B.S., M.S. and Ph.D. degrees are offered at the University of Arizona, which is on the semester system.

Interpretive Course

Title: Environmental Interpretation
Hours: 3 semester
Texts: Sharpe; Tilden, Van Matre

Course Description:
A comprehensive overview of the philosophies, techniques, and media used in communication between resource managers and resource users. Approximately 25 juniors majoring in Natural Resource Recreation (80%), Wildlife (10%), and Forestry (10%), enroll in this course each semester.

Course Requirements:
Reading assignments, field trips, and development of an interpretive plan and presentation of an interpretive program.

ARKANSAS TECH UNIVERSITY

E.E. Hudson
Dept. of Biological Sciences
Arkansas Tech University
Russellville, AR 72801
(501) 968-0326

Interpretive Curriculum

The B.S. degree in Park Administration or Fish and Wildlife is offered at Arkansas Tech University, which is on the semester system. Required courses in the Department of Recreation and Park Administration are:

General Education (History, Math, English, Philosophy)	21 hours
Biology, Geology, Zoology, Chemistry	31 hours
Fisheries & Wildlife, Conservation	18 hours
Recreation and Parks	15 hours
Commmunications	9 hours
P.E., M.S., First Aid	5 hours
Electives	15 hours
Total	124 hours

Interpretive Facilities

800 acre Lake Dardanelle, 400 acre Goose Pond Natural Area; the university is 80 miles from the Mid-America Center, etc.

Interpretive Course

Title: Interpretive Methods
Hours: 3 semester
Texts: Sharpe (required); Fazio and Gilbert (optional); Screven (optional).

Course Description:
This course provides an analysis of students' past summer employment with Recreation and Park agencies throughout the United States. A presentation based on the students' summer professional experience is given to the faculty and public, using audio-visual equipment. Approximately 40 seniors, majoring in Parks and Recreation (75%) and Wildlife (25%) enroll in this course each semester.

Course Requirements:
Lab project: prepare and present audio-visual program of selected subjects.

CALIFORNIA STATE UNIVERSITY - CHICO

Jon K. Hooper
Dept. of Recreation and Parks Management
California State University, Chico
Chico, CA 95929
(916) 895-6408

Interpretive Curriculum

The B.A. and M.A. degrees in Recreation Administration are offered at California State University - Chico, which is on the semester system. Required courses in this major, and their credit hours, are:

Foundations of Leisure and Recreation	3 hours
Leadership and Supervision in Recreation	3 hours
Management of Recreation and Parks	3 hours
Internship in Parks and Recreation	3 hours
Preparation for Internship	3 hours
Internship Seminar	3 hours
Environment and Comprehensive Planning for Recreation	3 hours
Maintenance of Recreation Areas and Facilities	3 hours
Planning and Design of Recreation Areas and Facilities	3 hours
Natural Resource Recreation	3 hours
Natural Resource Interpretation and Communication	3 hours

Also required are 9 units chosen from:

Recreation Budget and Finance	3 hours
Recreation and Natural Resource Management	3 hours
Field Biology	4 hours
Methods and Materials for Environmental Education	3 hours
Surveying for Non-Engineers	2 hours
General Soils	2 hours

Also required are 15 units chosen from:

Museum Principles	3 hours
Basic Drawing	3 hours
Plants and Man	3 hours
General Botany	4 hours
General Zoology	4 hours
Conservation Ecology	3 hours
Plant Physiology	4 hours
Dendrology	3 hours
Plant Taxonomy	4 hours
Plant Geography	2 hours
Fundamental Ecology	4 hours

(continued)

CALIFORNIA STATE UNIVERSITY - CHICO (continued)

Ichthyology	4 hours
Ornithology	4 hours
Mammology	4 hours
Photo Communication	3 hours
Introduction to Computer Science	3 hours
Report Writing	3 hours
Map Reading	3 hours
Mountain Geology	3 hours
Forests: A Multi-Use Ecosystem	3 hours
Biogeography	3 hours
Geology and Man	3 hours
Principles of Forestry	3 hours
Principles of Range Management	3 hours
Rangeland Wildlife Populations	3 hours
Introduction to Astronomy	3 hours

Interpretive Facilities

Bidwell Nature Center (which sponsors a community environmental education program), Bidwell Mansion State Historic Park (on campus), Bidwell Park (third largest municipal park in the U.S.), and an Instructional Media Center (AV materials, equipment, and supplies).

Interpretive Course

Title: Natural Resources Interpretation and Communication
Hours: 3 semester
Texts: Kodak (a); Sharpe; Tilden.

Course Description:
Theory and application of environmental interpretive services to visitors in parks, forests, refuges, and other natural resource settings. Communication of environmental information to general public via audio-visual presentations, conducted trips, exhibits, nature trails, publications, and visitor centers. Approximately 20-25 students (50% juniors, 45% seniors, 5% graduate students) majoring in parks and recreation (85%), biology (5%), geography (5%), and communication science (5%) enroll each semester.

Course Requirements:
Display board, self-guided trail project, slide-tape show, interpretive talk.

CALIFORNIA STATE UNIVERSITY - SACRAMENTO

Cary J. Goulard
Dept. of Recreation and Leisure Studies
Administration 267
California State University
Sacramento, CA 95819
(916) 454-7046 or 6725

Interpretive Curriculum

The Department of Recreation and Leisure Studies offers an option in Recreation Resources and Visitor Management. The specific objectives of this option are: natural resource management for recreational purposes; visitor management in outdoor recreation areas; and the management of services in various outdoor recreational settings. This option includes one course in Environmental Interpretation, described below.

Interpretive Facilities

The Sierra Nevada Mountains and the Pacific Ocean are within an hour's driving time of the University campus. Since the University is located in Sacramento, students are afforded the opportunity to participate in internship programs with state and federal agencies, as well as local businesses and industries.

Interpretive Courses

First Course

Title: Theories and Methods of Environmental Interpretation
Hours: 3
Text: Sharpe.

Course Description:
An introduction to environmental interpretation, which includes theories, principles, and techniques of interpreting recreation and/or park values and resources to the public; includes interpretive planning. Offered in Spring only.

Course Requirements:
This course has a contract grading system, allowing the students to pursue individual interests in interpretation by fulfilling a variety of options for the grade they desire. Two prerequisite courses.

CALIFORNIA STATE UNIVERSITY (continued)

Second Course

Title: Advanced Interpretation
Hours: 3 semester
Texts: an extensive series of readings is required.

Course Description:
This course will explore the principles, methods, and techniques applicable to: the development of museums and exhibit programs in natural and historic parks, the identification and development of historic sites and landmarks and master planning for interpretive facilities. Prerequsites: RLS 153 or consent of instructor. Not offered every semester.

EAST BAY REGIONAL PARK DISTRICT

Ron Russo, Interpretive Specialist
East Bay Regional Park District
11500 Skyline Blvd.
Oakland, CA 94619
(415) 525-2233

Interpretive Curriculum

Although the East Bay Regional Park District is not a college or university, but rather a municipal park district, instruction in interpretation is offered through this organization in the form of a special one week course concentrating on practical field techniques in natural history and historical interpretation. Staff members have assisted in training programs for the National Park Service, the Canadian Association of Interpreters, Huron-Clinton Regional Parks, the Califrnia Department of Parks and Recreation, and many other agencies and groups.

Interpretive Course

Title: Interpretive Methods Training
Hours: one week
Fees: contact Ron Russo for current information

Course Description:
The course will concentrate on a variety of practical field techniques under a diverse set of working situations. Class members will participate in field activities and observe professional naturalists in action with school groups. Participants will visit diverse study sites including oak woodland, freshwater habitats, bay shoreline, a 2,100 year-old Indian midden, an historic Welsh mine, and a grassland wildflower paradise. Enrollment is limited to 20 people in order to facilitate in-depth interaction and communication. More than 26 events will stress techniques involving:

- special interpretive messages through puppetry
- art in nature
- historical interpretation through role playing
- the public learning about Indian culture
- spontaneous interpretation with children
- supermarket nature walk - urban interpretation
- exhibit techniques for mini-visitor centers
- volunteer programs - how to design them to meet your needs

Along with methods for interpreting:

- seashores and marshes
- historic mines and cemetaries
- solar energy
- animals nobody loves
- from a boat
- for the handicapped
- with role playing
- wildlife
- through interpretive games
- other subjects

HUMBOLDT STATE UNIVERSITY

John G. Hewston
College of Natural Resources
Humboldt State University
Arcata, CA 95521
(707) 826-3438

Interpretive Curriculum

The B.S. and M.S. degrees are offered at Humboldt State University, which is on the quarter system. The Natural Resource Planning and Interpretation (RPI) major differs from the other specialized programs in the College of Natural Resources in its emphasis on people's relationships with their natural environment. The department offers a flexible curriculum emphasizing the need for development of a coexistant relationship between people and their natural environment. The objective of the RPI major is to provide an opportunity for students to gain knowledge and experience in their choice of either Resource Planning, Interpretation, or individually designed programs. In the Interpretation option, a four-course sequence is offered: Environmental Communication, Natural Resource Public Relations, Natural Resource Interpretation Methods, and Natural Resource Interpretation Methods Lab. Prerequsites to these courses are: Technical Writing, Instructional Media Methods, and either Business and Professional Speaking or Media Production, in addition to the students' science and Natural Resource courses.

Interpretive Facilities

Facilities include: lab space, equipment, classrooms, private forests, companies, and state fish hatcheries. Additional education is provided through internships, projects, speakers, assistance, and field trips to the following areas: Redwood National Park, state parks, county parks, city parks, national forest, national wildlife refuge, schools/school grounds, environmental centers, museums, and private industries.

Interpretive Courses

First Course

Title: Natural Resource Interpretation Methods (RPI-178)
Hours: 3 quarter
Texts: Sharpe; Tilden.

Course Description:
Lecture/discussion/practice in various natural resource interpretation techniques. This course is designed for seniors and graduate students in Environmental Communications and is offered every spring term. Approx-

HUMBOLDT STATE UNIVERSITY (continued)

Course Description (continued):
imately 24 students (95% seniors, 5% grads) majoring in Natural Resources Planning and Interpretation (90%), and other majors (10%) enroll in this course each term.

Course Requirements:
Written assignments and exams. Lab projects include brochure design, silkscreen display, slide presentation (with two-projector dissolve) and field trips.

Second Course

Title: Natural Resource Interpretation Methods Lab (RPI-179)
Hours: 1 quarter (three-hour lab)
Texts: Sharpe; Tilden.

Course Description:
Demonstrations, workshops, field trips, and projects associated with RP-178 Interpretation Methods lecture.

SAN DIEGO STATE UNIVERSITY

Dan Dustin or Dick Namba
Dept. of Recreation
San Diego State University
San Diego, CA 92182
(714) 265-5110

Interpretive Curriculum

San Diego State University offers an A.B. degree in Applied Arts and Sciences, with a major in Recreation Administration and an emphasis in Outdoor Recreation. San Diego State is on the semester system. Twenty-nine semester credit hours of lower division courses are required, including courses in recreation, biology, geography, geology, and communications. Undergraduate students must take a minimum of 39-45 upper division units including courses in recreation, interpretation, conservation, geography, and zoology; and courses in anthropology, biology, botany, and psychology are recommended. A 6 or 12 unit internship is required.

Interpretive Facilities

Facilities include: departmental lab space, complete multi-media resources available through the university, and a variety of nearby interpretive sites. These sites include: Cabrillo National Monument, Cleveland National Forest, Old Town State Historic Park, Torrey Pines State Reserve, San Diego Museum of Natural History, Quail Gardens County Botanical Gardens, the San Diego Zoological Society's zoo and wild animal park, Sea World, Scripps Aquarium, San Diego City Unified School District's four Outdoor Education Camps, and Camp Pendleton's Natural Resource Section (Department of Defense).

Interpretive Course

Title: Interpretive Techniques in Outdoor Recreation
Hours: 3 semester
Texts: Grater; Tilden; Van Matre(a).

Course Description:

This is an introductory course for the professional preparation of interpreters. Topics include communication skills, media devices, techniques, analysis, concepts of interpretation, roles of the interpreter, nature trail design, exhibits and centers, and audio-visual aids to interpretation. This course is designed to be a self-paced learning experience based on individual needs. Approximately 20-30 students (10% sophomores, 30% juniors, 60% seniors) majoring in Parks and Recreation enroll in this course each semester.

SAN DIEGO STATE UNIVERSITY (continued)

Course Requirements:

This course is graded on a contract system, with students desiring a particular grade performing specified assignments. These assignments may include: oral presentations, poster board display, interpretive pamphlet, slide program, interpretive trail, book review, research paper, and others.

UNIVERSITY OF CALIFORNIA - DAVIS

Kristie Lewis-Stevens
Environmental Planning and Management
University of California, Davis
Davis, CA 95616
(916) 752-6030 or 2-6326

Interpretive Curriculum

The B.S. in Environmental Planning and Management, with a Park Administration and Interpretation Option, is offered at the University of California at Davis. Davis is on the quarter system. Students in the major are required to take a 60 unit lower division "core" covering physical and earth sciences, biological and environmental sciences, social sciences and humanitites, math/computer sciences, economics, writing and public speaking. Upper division "core" courses cover 12 units of urban and regional planning. The Park Administration and Interpretation Option also requires 48 upper division units spread among natural sciences, resource management, park and public administration, interpretation, communication, recreation planning and resource economics, with 29 of the 48 units individually selected by students in conjunction with their advisors to meet their special needs. Internships are highly recommended as part of the individual plan to ensure adequate interpretive field experience. 30 unrestricted elective complete the 180 units required for the major.

NOTE: Environmental Planning and Management is currently undergoing a review. The major may change in the next several years. Please consult UCD catalogues or the University Registrar for current information.

Interpretive Facilities

On campus: all audio-visual equipment needed is available through the media department on campus; museums and nature areas are available through the University Aboretum and Environmental Education Center, and the Wildlife and Fisheries museum with curatorial classes and resources.

Off campus: California State Parks and Recreation Museums, historic sites, and natural areas either in Sacramento or nearby; Sacramento Science Center and Junior Museum; Ancil Hoffman Nature Center, Sacramento; Southgate Parks with the Norman Marsh Nature Center, Sacramento.

Interpretive Courses

First Course

Title: Environmental Interpretation Principles
Hours: 3 quarter
Texts: Alderson and Low; Magar; Sharpe; Tilden; assorted readings.

UNIVERSITY OF CALIFORNIA - DAVIS (continued)

Course Description:

Students will develop interpretive stratigies, based on interpretation/communication principles, to handle problems and situations that can occur when communicating with people at leisure, about the environment, in person or through other media. Approximately 15 students (mostly sophomores and juniors) majoring in Parks and Recreation (90%), Conservation (5%), Wildlife and Fisheries Biology (3%), and others (2%) enroll in this course each quarter.

Course Requirements:

2-3 papers; in-class group and individual presentations; midterm; final.

Second Course

Title: Environmental Interpretation Methods
Hours: 3 quarter
Texts: Hanna; Kodak(a); Sharpe; and an extensive lab notebook on interpretive media and methods.

Course Description:

This course is designed to build student competancy in planning, producing, presenting, maintaining, and evaluating interpretive programs. Laboratories emphasize skills and techniques for both interpersonal and mediated programs. Approximately 15 students (mostly juniors and seniors), majoring in Parks and Recreation (90%), Conservation (5%), Wildlife and Fisheries Biology (3%), and others (2%) enroll in this course each quarter.

Course Requirements:

Hour-long interpretive walk; 10-minute slide-tape (2 projector) presentation (students work in groups of 2 on this project); weekly interpretation evaluation assignment; lab final.

UNIVERSITY OF CALIFORNIA - SANTA BARBARA

Roderick Nash
Dept. of History and Environmental Studies
University of California at Santa Barbara
Santa Barbara, CA 93106
(805) 961-2968

Interpretive Curriculum

There is no major or specialization in interpretation at the University of California at Santa Barbara: the B.A. in Environmental Studies, and the B.A., M.A., and Ph.D. in History are offered here.

Interpretive Courses

First Course

Title: Cultural Resources Management
Texts: 20-30 key secondary articles and books.

Course Description:
A graduate seminar (6-10 students) investigating the value and interpretation of Indian and pioneer sites and artifacts in the Los Padres National Forest adjoining Santa Barbara. Both field and classroom work are included.

Course Requirements:
Preparation of a management plan for cultural resource studies.

Second Course

Title: Wilderness and Man
Texts: Nash.

Course Description:
An undergraduate lecture course concerning the meaning and value of wilderness.

Course Requirements:
Hour exam, two papers, final exam.

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

Jennifer Anderson, Lecturer Environmental Studies
ES Internships
231 Kerr Hall
University of California, Santa Cruz
Santa Cruz, CA 95064
(408) 429-2104

Interpretive Curriculum

The B.S. and B.A. degrees are offered at the University of California at Santa Cruz. While no degree entitled "Environmental Interpretation" is offered at this university, the interpretation course described below is offered by the Department of Environmental Studies. Students wishing to specialize in environmental interpretation or education develop their own study plan according to individual needs. For example, one student may have a double major with geology because that student wished to do interpretive work in that field. Another may take an area of concentration in education or psychology because that student plans to work in the public schools.

Interpretive Facilities

Many nearby interpretive situations include local schools, residential outdoor programs, local museum, and state parks.

Interpretive Course

Title: Environmental Interpretation
Hours: 3 lectures, 2 field trips per week, 6 field site
Texts: Cornell; selected readings.

Course Description:
This course is a field seminar designed to give students a philosophical and historical context for environmental education and interpretation. In addition, specific skills are taught for application in the required field placement. Approximately 20-35 students (20% sophomores, 40% juniors, 40% seniors) majoring in Environmental Studies enroll in this course each quarter.

Course Requirements:
Active participation in class, field placements, comprehensive journal, one short paper per week (2-4 pages), two books of the student's choice, review of curricular materials, and a term project.

COLORADO STATE UNIVERSITY

Charles L. Mahoney
College of Forestry and Natural Resources
Colorado State University
Ft. Collins, CO 80512

Interpretive Curricula

The B.S., M.S., and Ph.D. degrees are offered at Colorado State University.

Interpretive Courses

First Course

Title: Interpretive Services
Texts: Sharpe; Tilden.

Course Description:
This course is designed to acquaint the student with the role and scope of interpretive services in: a) assisting visitors in developing a sharper awareness, appreciation, and understanding of the area being visited; b) accomplishing management goals; c) promoting understanding of agencies and their programs; and d) examining the changing role of interpretation and its relationship to other disciplines. Approximately 50 students (upper division and graduate) majoring in Recreation Resources, Park History, and Wildlife, enroll in this course each Fall semester.

Course Requirements:
Requirements include: readings, field trips, nature center exercise, developing a self-guided tour, project presentation, and two exams.

Second Course

Title: Interpretive Techniques
Texts: Cornell; Hanna.

Course Description:
Approximately 30 students (upper division and graduate) majoring in Recreation Resources with a concentration in Environmental Interpretation enroll in this course each semester.

Course Requirements:
Assignments are given in woodshop, signs, master planning, museum techniques, relief map construction, and other topics. Field trips are also required.

UNIVERSITY OF GEORGIA

James R. Waters
Dept. of Recreation and Leisure Studies
No. 1 Peabody Hall
University of Georgia
Athens, GA 30602

Interpretation Curriculum

The B.S.Ed., M.Ed., and E.Ed. in Recreation and Leisure Studies are offered at the University of Georgia, which is on the quarter system. However, there is no speciality in interpretation. This department offers specialities in administration, outdoor recreation, and threapeutic recreation.

Interpretive Facilities

No lab space or equipment for interpretive projects is available. Nearby interpretive sites include: Sandy Creek Nature Center, Athens; Ft. Yargo State Park (20 miles); and Watson's Mill State Park (20 miles).

Interpretive Course

Title: Interpretation of Recreation
Hours: 5 quarter
Text: Sharpe.

Course Description:

This course will give the student an understanding of interpretation and its role within the recreation setting. The course is divided into three segments: 1) the interpretive process, 2) techniques of intepretation, and 3) support activities. Field work is required in to give the student practical experience. Approximately 15 students (20% juniors, 80% seniors) majoring in recreation and parks enroll in this course each quarter.

Course Requirements:

Students must develop and sign a nature trail as an outside assignment, as well as attend and critique a nature walk at Sandy Creek Nature Center.

UNIVERSITY OF IDAHO

Sam Ham
Dept. of Wildland Recreation Management
College of Forestry, Wildlife, and Range Sciences
University of Idaho
Moscow, ID 83943
(208) 885-7911

Interpretive Curriculum

The B.S., M.S., and Ph.D. degrees are offered at the University of Idaho, which is on the semester system. Within the Department of Wildland Recreation Management are three options: Interpretation/Communication, Management/Administration, and Planning/Design. The purpose of the Interpretation/Communication option is to allow majors to strengthen their abilities in interpreting the natural environment, natural resources, and environmental management to the general public. This option is strongly interdisciplinary, as it is built on a foundation of coursework in the biological sciences and natural resource management. A second dimension is provided by courses in social sciences, with particular emphasis on human behavior. Then, depending on the student's individual career choice, courses are selected in communication or other subjects appropriate to his or her personal objectives and field of intended endeavor.

Interpretive Facilities

Several tracts of land are available for interpretive purposes, including: 200-acre Big Meadow Creek Recreation Area, 36-acre Idler's Rest Nature Preserve, 60-acre Taylor Ranch field station, and 7000 acres of forested land on Moscow Mountain. Also available are: Nez Perce National Historic Park, Whitman Mission National Historic Place, several county and state parks in Idaho and Washington (within a 50-mile radius).

The department also offers a fully equipped media laboratory for student use. Some students are able to secure part-time jobs as Media Lab Assistants. The Lab includes a professional recording studio, copy stand, slide duplication facilities, light tables, drafting equipment, and related supplies. Equipment check-out is guaranteed for students in interpretive methods classes. Students in interpretation classes work on a variety of media projects for agencies, organizations, and businesses. The lab also serves as an audio-visual center for faculty and students in the College of Forestry, Wildlife, and Range Sciences. Equipment includes slide and movie projectors and related accessories, dissolve systems, audio recording equipment and accessories, a darkroom, lettering supplies and equipment, cameras and accessories, and a variety of art and graphic supplies.

UNIVERSITY OF IDAHO (continued)

Interpretive Courses

First Course

Title: Environmental Interpretive Methods
Hours: 3 semester
Texts: Lewis; Sharpe; Tilden.

Course Description:
Philosophy, theory, and practice of communicating natural and human historic information to users in leisure settings. Emphasis is on public presentation technique and audio, photographic, and graphic layout skills. Approximately 40 students (15% sophomores, 40% juniors, 35% seniors, 10% graduate students) majoring in Wildland Recreation Management (75%), Education (15%), Wildlife (5%), and Range Science (5%) enroll in this course each semester.

Course Requirements:
Course requirements include: constructing an interpretive exhibit; preparing a 3-minute audio message; taking one roll of slides; and participating as a two-day instructor at a resident environmental education camp for 6th graders, or attending and reporting on the Northwest Region AIN Workshop, or producing a ten-minute automated slide/tape presentation. Two mid-term and one final exam are given, along with three pop quizzes.

Second Course

Title: Introduction to Field Environmental Education
Hours: 2 semester
Texts: Brown; Cornell; Ford; Tanner.

Course Description:
Design and administration of Environmental Education programs for natural resource organizations, agencies, and camps. Interpretive methods for children in field and classroom are stressed. Emphasis on avenues for cooperation between resource specialists and educators. Approximately 20 students (30% juniors, 30% seniors, 40% graduate students) enroll in this course each semester.

Course Requirements:
Course requirements include guest speaker evaluations, 2 exams, and an energy interpretation project.

UNIVERSIY OF IDAHO (continued)

Third Course

Title: Interpretive Methods Lab
Hours: 3 semester
Texts: Fazio; Hanna; Kodak(a&b); Sharpe.

Course Description:
Advanced interpretive techniques for application in natural areas, museums, science centers, and other public settings. Heavy emphasis on technical communications skills: illustrated talks, audio-visual equipment, multi-media programming, simple and computerized sound synchronization systems, soundtrack production and multiple channel audio mixing, exhibit design, slide graphics, special effects copy work, slide duplication, video-tape production, darkroom technique and photo essay preparation. Several required projects and one 3-day field trip. Approximately 15 students (15% juniors, 40% seniors, and 45% graduate students) enroll in this course each term.

Course Requirements:
Projects include: exhibits, illustrated talks, slide/tape program, photo essay, slide graphics, interpretive sign, and a practical exam.

Fourth Course

Title: Public Relations Problems in Natural Resources Management
Hours: 2 semester
Texts: Fazio and Gilbert.

Course Description:
Approximately 20 students (20% juniors, 30% seniors, 50% grads) enroll in this course each year. Course objectives are to enable the student to:

1) be able to explain the meaning of public relations.
2) understand the principles underlying the practice of public relations and be able to draw on them to analyze and prevent or solve public relations problems.
3) recognize the "tools" of public relations, know when they should be used to an advantage, and with appropriate assistance be able to effectively use them to develop good public relations.
4) be able to identify publics, recognize their importance, and be able to use this information to communicate effectively and persuasively.
5) be able to synthesize the above factors to plan actions that will prevent or correct public relations problems.
6) be sensitive to the role of public realtions in the management of natural resources and recreation management, thereby making the student a more effective professional.

GEORGE WILLIAMS COLLEGE

Steve Van Matre
Department of Leisure and Environmental
Resources Administration
George Williams College
555 Thirty-First Street
Downers Grove, IL 60515

Interpretive Curriculum

The B.S., and M.S. degrees are offered at George Williams College.

Interpretive Facilities

A variety of facilities exist at the College, including: campus museum; master planning for 200-acre campus with 150 acres of marsh, prairie and climax forest; 200-acre section of virgin land in a kettle moraine area of southeastern Wisconsin; and numerous nearby nature centers, museums, historic sites, zoos, arboreta, plus Indiana Dunes National Lakeshore.

Interpretive Courses

First Course

Title: Environmental Education Methods
Hours: 3 quarter

Course Description:
Examination of major environmental education programs and materials to analyze their strengths and weaknesses, and to assess their utilization in a variety of situations. Approximately 15 students (25% seniors, 75% graduate students) majoring in Environmental Education/Interpretation (75%) and Recreation (Outdoor Leadership) (25%) enroll in this course each quarter.

Second Course

Title: Principles of Interpetation
Hours: 2 quarter

Course Description:
Analysis of the foundations of interpretation and an examination of principles for good interpretive programs (with emphasis on practical applications). Approximately 18 students (25% seniors, 75% graduate students) majoring in Environmental Education/Interpretation (75%) and Recreation (25%) enroll in this course each quarter.

GEORGE WILLIAMS COLLEGE (continued)

Third Course

Title: American Environmental History
Hours: 2 quarter

Course Description:
Analysis of past and present attitudes toward the land and its ecological communities, changes in patterns of thinking, and the influence these changes have had upon formal and informal environmental decision making. Approximately 8 students (20% seniors, 80% graduate students) majoring in Environmental Education/Interpetation (80%) and Recreation (Outdoor Leadership) (20%) enroll in this course each quarter.

Fourth Course

Title: Organization and Administration of Environmental/Interpretive Centers
Hours: 3 quarter

Course Description:
Analysis of the organizational structure and administration of environmental education/interpretation programs in various public and private agencies, museums, parks, historic sites, etc. Approximately 6 students (all graduates in Environmental Education/Interpretation) enroll in this course each quarter.

Fifth Course

Title: Communication Techniques
Hours: 3 quarter

Course Description:
Application of the fundamentals of interpretive writing and speaking. Practical experience in the preparation and presentation of interpretive offerings. Approximately 6 students (all graduate students in Environmental Education/Interpretation) enroll in this course each quarter.

Sixth Course

Title: Audio-Visual Techniques
Hours: 3 quarter

Course Description:
Design and development of interpretive materials and multi-media presentations for reaching large and/or diverse audiences. Approximately 8 students (all graduate students in Environmental Education/Interpretation) enroll in this course each quarter.

GEORGE WILLIAMS COLLEGE (continued)

Seventh Course

Title: Designing Interpretive Techniques
Hours: 3 quarter

Course Description:
Preparation and practice in creating interpretive tools and techniques and in planning comprehensive interpretive programs. Discussion of current issues and problems relating to individual interpretive styles. Approximately 6 students (all graduate students in Environmental Education/ Interpretation) enroll in this course each quarter.

Eighth Course

Title: Environmental Education and
Interpretation Practicum
Hours: 2 quarter

Course Description:
Visiting and analyzing interpretive programs and centers in the midwest (two weeks prior to the fall quarter; based at the College's Lake Geneva, Wisconsin campus). Approximately 6 students (all graduate students in Environmental Education/Interpretation) enroll in this course each fall quarter.

EASTERN ILLINOIS UNIVERSITY

William A. Smith - Assistant Professor
Room 10 McAfee Gym
Eastern Illinois University
Charleston , IL 61920
(217) 581-2510

Interpretive Curriculum

A B.S. in Recreation is offered at Eastern Illinois University, with an area of concentration in Outdoor Recreation. However, there is not a specific major or option in interpretation. Only one interpretation course is offered, described below. Eastern Illinois University is on the semester system.

Interpretive Facilities

There are two state parks within 5 miles of campus that have museums. The U.S. Army Corps of Engineers has a nature center 25 miles from campus, are used at least twice each semester.

Interpretive Course

Title: Environmental Interpretation
Hours: 2 semester
Texts: Sharpe; Tilden.

Course Description:

An overview of environmental interpretation as it applies to both natural and man-made areas to acquaint the student with techniques and resources available for the implementation of interpretive programs within various park and recreation agencies. Approximately 18 students (10% sophomores, 50% juniors, 40% seniors) majoring in Parks and Recreation (90%) and Biology (10%) enroll in this course each semester.

Course Requirements:

Assignments include field trips, a book review and report, a weekend project working at a state park, and extra readings.

BALL STATE UNIVERSITY

Charles O. Mortensen
Dept. of Natural Resources
Ball State University
Muncie, IN 47306
(317) 285-8106 or 7161

Interpretive Curriculum

The B.S., M.A., and M.S. in Natural Resources - Interpretation are offered at Ball State University. The interpretation option is designed to train environmental interpreters for a wide range of interpretive assignments, involving urban areas, as well as traditional park, forest, and other natural settings. Ball State's program was initiated with the understanding that the effective interpreter needs a foundation of four basic competencies: 1) knowledge and understanding of the natural and man-made environment, 2) effective use of communication skills, 3) understanding of people and societal relationships with the total environment, and 4) a knowledge of effective program planning and administration.

Students desiring interpretive training enroll for the undergraduate major in Natural Resources, complete the core requirements for the major, plus those outlined for the interpretive option. Graduate students take a series of courses designed to strengthen a variety of undergraduate backgrounds. Two courses have been developed in interpretation: 1) Principles of Interpretation, and 2) Organization and Management of Interpretive Programs. Provision is made for elective courses to broaden areas of special interest. Course work can include extended field experiences in established interpretive centers, such as Land Between the Lakes (Golden Pond, Kentucky), the Environmental Learning Center (Superior National Forest), and a number of private interpretive centers, as a vital part of the student's training. Field areas and other facilities owned by the University are available for program use.

Interpretive Facilities

Nearby interpretive facilities include: 17 acre Oak/Hickory woods adjacent to Natural Resources Building and other field areas located off campus, Sound/Visual Interpretive Lab, an interpretive work center for preparing exhibits, and darkroom.

Interpretive Courses

First Course

Title: Principles of Natural Resources Interpretation
Hours: 4 quarter
Texts: Harlow; Sharpe; Tilden.

BALL STATE UNIVERSITY (continued)

Course Description:

Develops skills and techniques necessary for the interpretation of ecological and environmental aspects of earth systems. Emphasis on field work and creative presentation of concepts. Prerequsites in Natural Resources, Geology, and Biology. Approximately 20 students (80% juniors and seniors, 20% gradate students) enroll in this course each quarter.

Course Requirements:

A variety of projects ranging from creative writing to living history presentations; including a major project such as developing a self-guided trail guide.

Second Course

Title: Organization and Administration of Interpretive Programs
Hours: 4 quarter
Texts: Ashbaugh(a&b); Carr; Sharpe; Shoman, et al..

Course Description:

Develops skills and techniques necessary for the sound organization and management of interpretive programs, including sites and facilities. Emphasis on planning procedures and field study of existing programs. Approximately 12-15 students (80% seniors, 20% graduate students) take this course each quarter.

Course Requirements:

Various projects, including: writing critical essays, individual and group construction of exhibits and the designing of an interpretive facility. Prerequsites: Introduction to Natural Resources, Soil Resources, Water Resources, Man and the Geological Environment, and Ecology.

PURDUE UNIVERSITY

Douglas M. Knudson
Dept. of Natural Resources
Purdue University
West Lafayette, IN 47907
(317) 494-3625

Interpretive Curriculum

The B.S., M.S., and Ph.D. degrees in Forestry are offered at Purdue University; however, no specific curriculum in interpretation is offered. Purdue is on the semester system. Students in 1) Forest Recreation, and 2) Natural Resources and Environmental Science often choose an interpretation emphasis, with courses in natural history and communications (graphic, written, spoken).

Interpretive Facilities

Interpretive facilities include: 3 county park/historical exhibit sites; 2 campus forests; Tippecanoe forests; TV studio; and basic equipment and resources (tape recorders, exhibit lettering, drafting room, etc.).

Interpretive Course

Title: Environmental Interpretation
Hours: 3 semester
Texts: Sharpe; Tilden.

Course Description:

This course is designed for aspiring professional interpreters and administrators of recreation areas. Most students in this course are seniors or juniors with strong training in natural history and communication skills. The students will employ their scientific/humanities backgrounds in practicing interpretive presentations using several media. Approximately 12-20 students (35% juniors, 60% seniors, 5% graduate students) majoring in parks and recreation (35%), wildlife (20%), conservation (15%), and forestry (30%) take this course each semester.

Course Requirements:

Assignments include: the development of a radio spot, "print" presentation, television presentation, guided hike, campfire talk, living history, exhibit, slide show, prospectus, and a final exam. Also, at least one extended field trip to an interpretive center is planned that requires travel outside of normal class hours.

KANSAS STATE UNIVERSITY

Ben D. Mahaffey
Dept. of Forestry
215 Call Hall
Kansas State University
Manhattan, KS 66506
(913) 532-6923

Interpretive Curriculum

The B.S. degree in Natural Resource Management with an option in Park and Recreation Areas Management is offered at Kansas State University, which is on the semester system. There is no interpretive curricula per se at this school; however, one interpretive course is offered, and described below.

Interpretive Course

Title: Methods of Environmental Interpretation
Hours: 3 semester
Texts: Sharpe; Tilden.

Course Description:
The course covers the following areas: the principles and techniques necessary to communicate values of man's total environment to visitors in park and recreation areas; the synthesis and analysis of information necessary in various types of formal and informal presentations; the philosophy, design, and use of interpretive devices to communicate the understanding of man's total environment to visitors in park and recreation areas. Approximately 20 students (40% juniors, 50% seniors, and 10% graduate students) majoring in Parks and Recreation (90%) and Education (10%) enroll in this course each semester.

Course Requirements:
Two field trips and a field laboratory session. An extended, 7-day field trip will be offered. Other assignments include: 5 abstracts on different aspects of interpretation; a semester or class project; a simple, 5-minute, hand-delivered slide show; a simple interpretive recording; a two-page original interpretive article; a simple sign display; a 7-minute TV interpretive demonstration, using some type of AV support material; an 8-minute guided interpretive walk; and completion of an Information Retrieval System.

MOREHEAD STATE UNIVERSITY

Elizabeth P. Nesbitt
UPO 858
Morehead State University
Morehead, KY 40351
(606) 783-2259

Interpretive Curriculum

The B.A., B.U.S. (Bachelor of University Studies), and M.A. degrees in Health, Physical Education, and Recreation are available at Morehead State University, which is on the semester system. Outdoor Interpretation, described below, is a required course in Recreation.

Interpretive Facilities

Nearby intepretive facilities include: Daniel Boone National Forest; Rodburn Park (trails), Cave Run Lake (camp, beach area, outdoor theatre); Minor Clark State Fish Hatchery; a private marina; Morehead City Park (fitness trail); Heritage Community Center for senior citizens; and Eagle Lake.

Interpretive Course

Title: Outdoor Interpretation
Hours: 3 semester
Texts: Sharpe.

Course Description:

This course is designed to pull together facts from many disciplines and to apply this information as it relates to the environment and recreation. Emphasis is given in interpretive areas which are applicable to recreation and outdoor professions. Development of a known awareness, appreciation of the environment, and the art of communication are primary objectives of this course. Approximately 20 students enroll in this course each semester. Recreation majors are required to take this course; it is an elective for environmental science majors.

Course Requirements:

1. Preparation and display of field materials (herbarium collection), dry flowers (2 displays), mounting insects (butterflies), collection and framing of spider webs.
2. Display of signs, labels, and brochures.
3. Talks -
   a. interpretive talk (media and/or area)
   b. talk on brochures.

MOREHEAD STATE UNIVERSITY (continued)

4. Field Trips -
   a. Interpretive walk
   b. Hiking trails (use of maps and compass)
   c. Cave Run Lake Marina, campgrounds, and beach area
   d. City Park - buildings and facilities
   e. Senior Citizens Center
   f. Minor Clark State Fish Hatchery
   g. Fossil hunt
   h. Survey of fauna populations
   i. Sky watch (astronomy).
5. Four tests, including materials on meterology, geology, geography, flora and fauna, and oceanography.

WESTERN KENTUCKY UNIVERSITY

Charles T. Crume
220 Diddle Arena
Western Kentucky University
Bowling Green, KY 42101
(502) 745-3591

Interpretive Curriculum

The B.S. and M.S. degrees in Recreation are offered at Western Kentucky University. Required courses include: Introduction to Outdoor Education, Development of Nature Oriented Areas and Facilities, and Techniques in Outdoor Education. Recommended courses include: Outdoor Recreation Activities, Recreation Workshop, Plant Taxonomy, Anthropology, Historic Geology, Folklore, and Environmental Studies.

Interpretive Facilities

Nearby interpretive facilities include: Wildcat Hollow Boy Scout Camp, Russellville; Benheim Forest, Clearmont; Basnnon River Reservoir, Bowling Green; Mammouth Cave National Park, Glosgow; Shanty Hollow, Bowling Green; Land Between The Lakes, T.V.A., Golden Pond; Cresmoor Woods Nature Park, Bowling Green.

Interpretive Courses

First Course

Title: Introduction to Outdoor Education
Hours: 3 semester
Texts: Comstock; Crume; McLuhan.

Course Description:
A study of the concepts and fundamentals of teaching in the outdoors with an emphasis on outdoor education experiences. Approximately 35 students (80% juniors, 20% seniors) majoring in Parks and Recreation (70%), Education (10%), Biology (5%), and other majors (15%) enroll in this course, which is taught in the fall and/or spring as needed.

Course Requirements:
Three field trips, 3 papers involving library work in archeology and local flora and fauna.

WESTERN KENTUCKY UNIVERSITY (continued)

Second Course

Title: Development of Nature Oriented Areas and Facilities
Hours: 3 semester
Texts: Sharpe; U.S. Ag and Soil Conservation Materials; Urban and Regional Planning Guides; in-house developed materials; and slides.

Course Description:
A study of nature trail design and preparation, live and inanimate exhibit design and preparation, resource inventory, building, vandalism, and other problems related to the development of nature-oriented areas and facilities. Approximately 30 students (30% juniors, 60% seniors, 10% graduate students) majoring in Parks and Recreation (70%), Education (10%), Biology (5%), and other majors (15%) enroll in this course. It is taught in the fall and/or spring as needed.

Course Requirements:
Three theoretical planning projects, 1 practical (field) project, 1 oral report, and a paper reflecting the project.

Third Course

Title: Techniques in Outdoor Education
Hours: 3 semester
Texts: various sources including: Nature Study, Outward Bound, Van Matre(a), and research reports

Course Description:
A study of the importance of such elements as field trips, nature crafts, audio-visual aids, and interpretive materials and programs in the development of outdoor education as a recreational activity. Approximately 25 students (30% juniors, 60% seniors, 10% graduate students) majoring in Parks and Recreation (70%), Education (10%), Biology (5%), and other majors (15%) enroll in this course each semester. This course is taught in the fall and/or spring as needed.

Course Requirements:
Two written papers, 1 oral report, and a major paper (development of a complete program for a selected population).

Fourth Course

Title: Outdoor Education Workshop
Hours: 3 semester
Texts: Ford.

WESTERN KENTUCKY UNIVERSITY (continued)

Course Description:

This course is designed to expand professional skills. The course will deal with certifiable areas either from national organizations or a university curriculum certificate and various resource management subject areas related to Land Between the Lakes facilities. Numerous guest speakers are included. Approximately 20 students (20% juniors, 75% seniors, 5% graduate students) majoring in Parks and Recreation (70%), Education (10%), Biology (5%), and other majors (15%) enroll in this course each semester. This course is taught in the spring and/or fall as needed.

Course Requirements:

A 10-day live-in field experience at Land Between the Lakes, that includes all aspects of the facility; trails, Environmental Education Center, etc. Also, demonstration of skills development in current areas of outdoor recreation/education and research.

CATONSVILLE COMMUNITY COLLEGE

Richard Soisson
Department of Leisure Studies and Activities
Catonsville Community College
30 Martz Rd.
Sykesville, MD 21784
(301) 795-3274

Interpretive Curriculum

The A.A. degree in Recreation and Leisure Services is offered at Catonsville Community College, which is on the semester system. Required courses in the major include: Introduction to Recreation, Programming, Outdoor Recreation, and Leadership. Recommended courses include: Administration, Public Speaking, and Park Management.

Interpretive Facilities

Nearby interpretive facilities include: Piney Run Nature Center, Irvine Natural Science Center, and Oregon Ridge Nature Center.

Interpretive Course

Title: Fundamentals of Interpretive Services
Hours: 3 semester
Texts: Tilden.

Course Description:
Discuss and develop principles and techniques used for interpretation of environmental, natural, historical and other features of recreation and park facilities to the visitor. Approximately 15 sophomores majoring in Parks and Recreation (90%) and other majors (10%) enroll in this class each semester.

Course Requirements:
Class participation; group interpretive slide show of 5-10 minutes; individual interpretive display; program plan and presentation; and a written final exam.

FREDRICK COMMUNITY COLLEGE

Loren W. Lustig
Department of Parks and Recreation
Fredrick Community College
7932 Oppossumtown Pike
Frederick, MD 21701
(301) 694-1273

Interpretive Curriculum

The Associates of Arts degree is offered by Fredrick Community College, which is on the semester system. Required courses for students of interpretation are: Conservation of Natural Resources, Introduction to Wildlife Management, Introduction to Fisheries Management, Introduction to Forestry, Resource Protection and Safety, Recreational Resource Planning and Management, and Park Management.

Interpretive Facilities

Extensive field equipment is owned by the Parks and Recreation Department. Local interpretive centers abound, including those operated by Federal, State, and County agencies. Mather Training Center (National Park Service) is near the College.

Interpretive Course

Title: Fundamentals of Interpretation
Hours: 3 semester
Texts: Shoman; Tilden.

Course Description:

The course covers the management and operation of a balanced field interpretation program, including: personal and self-guided services, visitor center operations, demonstrations, personnel services, and other activities to develop environmental awareness. Interpretation of historical sites, use of visual aids in interpretation, establishing and operating nature programs is also covered. Approximately 12 students (50% freshmen, 50% sophomores), majoring in Parks and Recreation (60%), Wildlife (20%), Conservation (10%), and other subjects (10%), enroll in this course each semester.

Course Requirements:

Two examinations per term, one oral interpretive presentation before the class, attendance at two weekend field trips to interpretive sites, written summary due following field trips, and development of one interpretive file folder.

HOOD COLLEGE

Anne Swisher and Ralph Nilson
Dept. Physical Education, Recreation, and Leisure Studies
Hood College
Frederick, MD 21701
(301) 663-3131 ext 204

Interpretive Curriculum

The B.A. degree is offered at Hood College, which is on the semester system. There is no identified curriculum in interpretation at Hood College. However, if a student is interested in this area, every effort will be made to accomodate his/her needs - i.e., exhange program with Frederick Community College, fieldwork placements at appropriate sites, and environmental studies coursework at Hood College.

Interpretive Course

Title: Nature Interpretation
Hours: 2 semester

Course Description:
Approximately 5-10 students, majoring in Parks and Recreation (50%), Education (25%), and Biology (25%) enroll in this course each semester.

UNIVERSITY OF MARYLAND

Jerry Vaske
2354 PERH Bldg.
Dept. of Recreation
University of Maryland
College Park, MD 20742
(301) 454-3279 or 5621

Interpretive Curriculum

The B.S., M.S., and Ph.D. degrees are offered at the University of Maryland, which is on the semester system. In the Department of Recreation, students may specialize in Recreation and Park Administration, Outdoor-Interpretation, Program Specialization (in drama, music, dance, etc.) Resource Management, Therapeutic Recreation, or other alternatives tailored to the student's individual needs. The Outdoor-Interpretation option is for the student who wishes to become an interpretive naturalist or historical interpreter and communicate with others about natural and man-made environments. Studies center around gaining knowledge and understanding of these interrelated environments, the effective use of communication skills, human behavior, and interpretive program planning and administration. A variety of classroom and field experiences are available to assist the student in preparation for the future.

Interpretive Facilities

One lab with 15 drawing tables and assorted types of equipment. All public facilities available in the Washington D.C. area.

Interpretive Courses

First Course

Title: Nature Interpretation
Hours: 3 semester
Texts: Sharpe; Tilden; others.

Course Description:
1) Evaluate the effectiveness of a variety of currently used interpretive techniques, 2) develop students' interpretive ability, and 3) examine the role of interpretation within the domain of resource management. Approximately 20 students (sophomores and juniors) majoring in Parks and Recreation (50%), Conservation (25%), Education (10%), Biology (5%), Wildlife (5%), and other majors (5%) enroll in this course each semester.

UNIVERSITY OF MARYLAND (continued)

Course Requirements:
Interpretive talk, sign, information brochure, nature trail brochure, exhibits, a final project, and two exams.

Second Course

Title: Natural and Historical Interpretation
Hours: 3 semester
Texts: None; however, readings from numerous sources are assigned.

Course Description:
This course concentrates on the social psychological underpinnings of interpretation. The objectives are: 1) to develop a theoretical framework for designing and evaluating interpretive programs, and 2) to critically evaluate a variety of methods and techniques currently used in interpretive settings through the application of theory. Approximately 20 juniors and seniors take this course each semester.

Course Requirements:
Ten 2-page written assignments, a 10-20 page term paper, and class participation.

NORTHEASTERN UNIVERSITY

James Shuman
Dept. of Recreation and Leisure Studies
360 Huntington Ave.
Northeastern University
Boston, MA 02115

Interpretive Curriculum

The B.S. degree in Recreation and Leisure Studies with a speciality in Outdoor Recreation/Environmental Education is offered at Northeastern University, which is on the quarter system. The department offers these courses: Environmental Education, Interpretation of Ecological and Social History, Seminar in Environmental Issues and Legislation, Outdoor Recreation Planning, and Survey of Facilities.

Interpretive Facilities

There are many interpretive facilities in the Boston area, including: Children's Museum, Museum of Science, Boston Harbor Islands, Lowell Urban Heritage Park, Blue Hills Interpretive Center, and Thompson Island Education Center. Northeastern University operates the Warren Center in Ashland, Massachusetts, which sponsors a summer camp for children and a variety of workshops during the school year.

Interpretive Course

Title: Interpretation of Ecological and Social History
Hours: 4 quarter
Text: Sharpe.

Course Description:
This course looks at the interpretive process and the role of the interpreter in park management and visitor experience enhancement. Students will have an opportunity to develop interpretive skills through preparation and delivery of a conducted walk in Boston. Approximately 10-15 students (juniors and seniors) majoring in Parks and Recreation (95%) and other disciplines (5%) enroll in this course each quarter.

Course Requirements:
Field trips to interpretive programs; five-minute presentations; preparing and delivering a conducted walk for a community group; and a paper on the meaning of interpretation.

SPRINGFIELD COLLEGE

Laura Judd
Dept. of Environmental Studies
Springfield College
Springfield, MA 01109
(413) 788-3379

Interpretive Curriculum

The B.S. and M.S. degrees in several branches of Environmental Studies are offered at Springfield College, which is on the semester system. Speciality areas include: Environmental Science and Technology, Environmental Planning Analysis, Environmental Administration, Environmental Recreation and Resource Management, and Environmental Interpretation. The aim of the Environmental Interpretation program is to provide the student with an understanding of the physical, natural, and social sciences in order to assist others in becoming more concious of the environment and basic ecological priniciples. A strong emphasis is placed upon "hands-on" experience gained through field work and other projects of an applied nature.

Interpretive Facilities

Springfield College has an 82-acre "East Campus" of heavily wooded land on the geographic center of Springfield, which includes a replica of a Pueblo built in 1932 which the department utilizes. The East Campus has been described by the National Science Foundation as an Ecological Preserve. It has been marked off into 200-foot quadrants with markers and a map. The US Forest Service has done a bird survey the past 3 years on this land. Lab space is available on East Campus as well as extensive lab facilities on campus.

Interpretive Course

Title: Interpreting the Environment
Hours: 3 semester
Texts: Lewis; Sharpe; Tilden.

Course Description:
This course will focus on interpretation as the art of explaining the relationship of man to his environment. Interpretation is a technique used in National and State parks, forests, nature centers, as well as in environmental programs in schools. Interpretation of water, soils, air, forests, wildlife, ecosystems, energy, land use, pollution, and population will be included. Approximately 8 students (50% juniors, 50% seniors), majoring in Parks and Recreation (80%), Biology (10%), and other majors (10%), enroll in this class each semester.

SPRINGFIELD COLLEGE (continued)

Course Requirements:

Regular class attendance, midterm and final exams, individual projects (self-guided trail, guided walk, and slide show), and class projects (exhibit and field trips, including historical, living interpretation, environmental interpretation, and environmental education).

UNIVERSITY OF MASSACHUSETTS

William E. Randall
Leisure Studies and Resources
109 Hills North
University of Massachusetts
Amherst, MA 01003
(413) 545-2255

Interpretive Curriculum

The B.S. degree with a major in Leisure Studies and Resources is offered by the University of Massachusetts, which is on the semester system. Requirements in various subject areas are described below for the option in Environmental Interpretation:

Communications	18 hours
Humanities/Fine Arts	3 courses
Social/Behavioral Science	12 hours
Numerical/Natural Science	9 hours
Leisure Studies and Resources	33 hours
Internship	15 hours
Concentration Area (American History, Natural History, Natural Resources, Archeology, etc.)	18 hours
Electives	6-18 hours

Interpretive Facilities

Local sites of natural history, archeology, historical, and natural resource interest are abundant. The area offers many museums, parks, sanctuaries, zoos, and aquaria. Internship opportunities also abound. Meetings of interpretive groups (including AIN, AIN Region II) and the Massachusetts Environmental Education Society often take place nearby. Available within this department: drafting studios, AV equipment, and photo lab with darkroom.

Interpretive Courses

First Course

Title: Introduction to Environmental Interpretation
Hours: 3 semester credits
Texts: Sharpe.

Course Description:
This course is designed for students who plan to become interpreters, students who are exploring this as a possible career choice, students who wish to develop interpretation as a minor career ability, and those who

UNIVERSITY OF MASSACHUSETTS (continued)

Course Description (continued):
have other career goals which may bring them in touch with interpreters in positions such as park administrators, wildlife managers, and forest supervisors. Approximately 15 students (60% sophomores, 20% juniors, 20% seniors) majoring in Parks and Recreation (50%), Conservation (20%), Biology (10%), Wildlife (10%), and Forestry (10%), enroll in this course each semester.

Course Requirements:
Several field trips, photographic project, term paper, two exams.

Second Course

Title: Environmental Interpretation
Hours: 3 semester
Texts: Lewis; Sharpe.

Course Description:
This course places emphasis on the practical aspects of interpretation. The course is designed to allow the student to: 1) develop specific skills and techniques in a broad variety of interpretive situations; 2) participate with interpretive professionals at an interpretive conference; 3) visit interpretive programs, settings, and institutions; 4) become more practiced in locating and using resources for the interpreter; and 5) enhance creative, analytic and applied abilities in researching, evaluating and planning the interpretation of an individually selected site. Approximately 10 students (75% juniors, 25% seniors), majoring in Parks and Recreation (60%), Biology (10%), Conservation (10%), Forestry (10%), and History (10%) enroll in this course each semester.

Course Requirements:
Identify and interpret an object provided by the instructor; class project of planning an urban self-guided trail; prepare a manuscript for a subject matter guide of restricted scope; conduct an interpretive tour; research and plan non-personal interpretation for a nearby area; prepare an automated slide show; one hour exam.

ALBION COLLEGE

Will Reding
Whitehouse Nature Center
Albion College
Albion, MI 49224
(517) 629-2030

Interpretive Curriculum

The B.A. and B.S. degrees are offered at Albion College, but there is no degree program offered specifically in interpretation. Albion College is on the semester system.

Interpretive Facilities

The Interpretive Building of the Whitehouse Nature Center, 125-acre natural area of WNC plus other natural areas within a 50-mile radius of the Whitehouse Nature Center.

Interpretive Course

Title: Interpretation of our Natural Environment
Texts: Leopold; Giono.

Course Description:
This course is intended for students who wish to explore Michigan's natural world and then interpret it to others. Areas covered include: units on the outdoors (birds, prairies, ecosystems, mammals); methods, skills, and techniques of interpretation; the land ethic; and practical experiences in interpretation. Approximately 5-15 students (20% freshmen, 30% sophomores, 30% juniors, and 20% seniors) majoring in Biology (15%), Education (5%), and other subjects (85%) enroll in this course each semester.

Course Requirements:
Class attendance and two additional hours per week; 14 Seaton Watches; final exam; 5 quizzes; and an interpretive project (presentation, display, program for the public, etc.).

CENTRAL MICHIGAN UNIVERSITY

Lynn Fauver
124 Rowe Hall
Central Michigan University
Mt. Plesant, MI 48859
(517) 774-3829

Interpretive Curricula

The B.S., B.A., B.F.A., and B.I.S. degrees are offered at Central Michigan University, which is on the semester system. The Interpretive Naturalist Program provides the professional interpreter, as well as other professionals who use interpretive techniques, with the broad range of skills and experiences to meet these varied needs. The program provides valuable assets to students majoring or minoring in such disciplines as Biology; Conservation; Recreation and Park Administration; Geology; Anthropology; Elementary, Secondary, or Special Education; and many others. Courses in the Interpretive Naturalist Program encompass a broad range of interest areas, including: Communication Skills, Basic Identification Skills, Ecological Relationships, Depth and Understanding of Cultural Patterns and Influences, and Basic Manual Skills.

This program is designed to supplement the course requirements of existing major and minor areas. Since the program is extremely flexible, each student develops an individualized course of study best suited to his or her interests and needs in cooperation with the program directors. Relevant work experience or other pertinent activities may substitute for some course work.

Following the completion of the program requirements, each student is issued a certificate of achievement. This certificate becomes part of the student's academic background and may be used for such purposes as employment application or application for advanced study.

Interpretive Facilities

Central Michigan University owns and maintains several outdoor areas which may be used to develop interpretive skills, including: Beaver Island Biological Station, 252-acre Neithercut Woodland, Grand Haven Dunes, 16-acre Veit's Woods, Stevenson Lake, and the Center for Cultural and Natural History (an on-campus museum).

Interpretive Courses

First Course

Title: Environmental Interpretation
Hours: 2 semester
Text: Sharpe.

CENTRAL MICHIGAN UNIVERSITY (continued)

Course Description:
Techniques of leading nature hikes and developing environmental education and historical interpretation programs. Approximately 15 students (juniors, seniors, and graduate students) majoring in Parks and Recreation (60%), Biology (30%), and History or Anthropology (20%), enroll in this course each semester.

Course Requirements:
At least one field trip to a major museum in Michigan or neighboring states. Students are be evaluated on the basis of 1 class project (10%) and 3 major exams (90%).

Second Course

Title: Introduction to Museum Work
Hours: 3 semester
Text: Alexander.

Course Description:
Exploration of the duties and responsibilities encountered in museum work. Collection care and development, exhibit preparation, and educational program development are among the topics discussed. This course is designed as a very descriptive lecture series dealing with the tasks and responsibilities of museum professionals. 500 level is requested so the students have both a good general education base and to allow both graduate and undergraduate enrollment. Approximately 14 students (sophomores - graduate students) enroll in this course each term.

Course Requirements:
At least one field trip to a major museum in Michigan or neighboring states. Three hours of lecture and demonstration per week. Students are evaluated on the basis of 1 class project (10%) and 3 major exams (90%).

Third Course

Title: Museum Science Lab
Hours: 3 semester
Texts: none.

Course Description:
Experimentation with materials and techniques utilized within the museum profession. Methods of collection care as well as exhibit preparation is investigated. This course allows the student to perfect techniques that are used in the daily operation of a museum. Approximately 12 students (sophomore to graduate students) enroll in this course each semester.

CENTRAL MICHIGAN UNIVERSITY (continued)

Course Requirements:

A minimum of one trip is taken to an established museum to view the facility and to talk with the personnel. Students complete laboratory projects (90% of course grade) demonstrating their mastery of each assigned skill. In addition, one exam (10% of course grade) is given covering the assigned subject matter.

Fourth Course

Title: Museum Internship
Hours: 6 semester
Texts: none.

Course Description:

Supervised practical experience in the administration of museum facilities and their programs. Experiences include: program development and delivery; budget preparation; grantsmanship; exhibit design; etc. Approximately 1 student (senior or graduate student) majoring in Parks and Recreation (20%), Education (10%), Biology (30%), History (20%), Anthropology (15%), and Geology (5%) enroll in this course each semester.

Course Requirements:

General field experience, individual conference, daily supervision, and a major paper are required. Subjective evaluation by immediate supervisor (75% of course grade) and major paper (25% of course grade).

MICHIGAN STATE UNIVERSITY

Maureen H. McDonough
Dept. of Park and Recreation Resources
Michigan State University
131 Natural Resources Building
East Lansing, MI 48824
(517) 353-5190

Interpretive Curriculum

The B.S., M.S., and Ph.D. degrees are offered at Michigan State University, which is on the quarter system. Students majoring in Park and Recreation Resources may select an emphasis in Environmental Interpretation. With this emphasis, students take five core courses: Environmental Attitudes and Concepts, Environmental Interpretation II - Methods and Devices, Sky Interpretation, and Human Communication I and II. They also take a series of courses in Biology or Chemistry, and courses in Soils, Ecology, Botany, Animal Ecology, Statistics, Communication, and complete either four natural sciences courses or four historical/cultural courses. A professional internship or professional work experience is also required.

Interpretive Facilities

Michigan State University Museum, Abrams Planetarium, Fenner Arboretum/ Nature Center (local), Woldemar Nature Center (local), Michigan Association of Nature Centers and Museums, and the Cooperative Extension Service/Information Services.

Interpretive Courses

First Course

Title: Environmental Interpretation I: Principles
Hours: 3 quarter
Texts: Bellison, Hawks, and Pulsipher; Propst and Roggenbuck; Tilden; assigned readings.

Course Description:
This course is designed to be an introduction to the broad field of interpretation and to provide students with a base for further coursework in this area. Upon completion of this course, a student should:

a) understand the definitions, role and scope of interpretation
b) understand the basic human communication theory as it applies to interpretation
c) understand the differences between audiences and/or users of interpretive services

MICHIGAN STATE UNIVERSITY (continued)

d) be able to distinguish between interpretive techniques based on their advantages/disadvantages; and
e) based on the above, be able to plan effective interpretive services in terms of audience, setting, subject matter, and media.

Approximately 50 students (25% sophomore, 35% junior, 35% senior, 5% graduate students) majoring in Parks and Recreation (30%), Wildlife (30%), Forestry (5%), and other disciplines (35%) enroll in this course each quarter.

Course Requirements:
Interpretive writing, exhibit mockup, oral presentaion, critique of local interpretive services, presentations critique, final exam.

Second Course

Title: Environmental Interpretation II: Methods
Hours: 4 quarter
Texts: Sharpe; assigned readings.

Course Description:
This course has two objectives. Upon completion of the course, a student should:
a) have a broad view of the diversity possible in the field of interpretation through better approaches and methods; and
b) have a basic working knowledge of the range of methods/devices available in implementing interpretive services.

Approximately 30 students (25% juniors, 50% seniors, 25% graduate students) majoring in Parks and Recreation (30%), Wildlife (30%), and other disciplines (30%) enroll in this course each quarter.

Course Requirements:
Organize and implement an interpretive program in the community; complete an interpretive plan (class projects vary each year with community needs); final exam.

NORTHERN MICHIGAN UNIVERSITY

Jarl Roine, Head
Dept. of Geography, Earth Science, and Conservation
Northern Michigan University
Marquette, MI 49855
(906) 227-2500

Interpretive Curriculum

The B.S. degree in Conservation and M.A. degree in Geography are offered at Northern Michigan University, which is on the semester system. The major in Conservation is available in a 52 and 60 semester hour program offered under any one of three options, each with a 32 semester common core. The remaining 20 to 28 semester hours are taken according to the option chosen by the student in consultation with the departmental advisor. A student interested in Park Interpretive work may choose a cognate in History and Biology, or Geology. In the Fall of 1982, there were 210 majors in this department. While no course specifically covering interpretive principles or techniques is offered at Northern Michigan University, other related courses are offered.

Interpretive Facilities

Camp Cusino: a complete field station with dorms, labs, classrooms, etc. Greenwood Reservoir: an environmental studies facility for day use. Longyear Forest: a University-owned forest. Extensive and accessible natural sites are nearby, including the Lake Superior shoreline.

UNIVERSITY OF MICHIGAN

Tom Thomas, Paul Nowak
School of Natural Resources
University of Michigan
Ann Arbor, MI 48103

Interpretive Curriculum

The B.S., M.S., and Ph.D. degrees in Natural Resources are offered at the University of Michigan, which is on the semester system. The specific curriculum for students interested in interpretation is dependent on student interest and desired job interest, and tailored to individual needs.

Interpretive Facilities

Although there are no on-site facilities, interpretive facilities are available in the community and the region.

Interpretive Course

Title: Nature Interpretation
Hours: 3 semester
Text: Sharpe.

Course Description:

A field study course dealing with interpretive techniques. The course is based on a field teaching experience augmented with lectures and field visits dealing with visitor orientation, exhibits, trails, communications, museums, publications, and mass media. Approximately 15-20 students (5% sophomores, 70% juniors, 15% seniors, and 10% graduate students), majoring in Conservation (40%), Education (10%), Biology (10%), Wildlife (10%), Forestry (10%), Parks and Recreation (5%), and other disciplines (15%), enroll in this course each semester.

Course Requirements:

Log of lab experience with evaluation; development of an exhibit; major presentation; and 2 topic papers.

BEMIDJI STATE UNIVERSITY

Ray A. Nelson
Center for Environmental/Outdoor Education
P.O. Box 44
Bemidji State University
Bemidji, MN 56601
(218) 755-2850

Interpretive Curriculum

The B.S. degree in Environmental Mass Communications/Emphasis in Environmental/Interpretation, is offered at Bemidji State University, which is on the quarter system. The Environmental/Interpretation program is designed to prepare professionals for Environmental Interpretation careers with parks, nature centers, museums, camps, resorts, and other agencies and institutions which conduct such programs. The program offers skills development in communication media and environmental/outdoor education. An interdisciplinary approach is being utilized because environmental interpreters must communicate a broad range of topics and concerns on the interpersonal level and through various media.

Interpretive Facilities

Bemidji State University is ideally suited for study in the Environmental Education/Interpretation program. The University is in the heart of the lake and forest region of North Central Minnesota. The campus, including its modern science and arts buildings with a limnology laboratory, is located on the shore of Lake Bemidji. A color television studio and radio station are available on campus. Nearby areas include: Hobson Memorial Forest, White Otter Wilderness, and Itasca State Park (30 miles).

Interpretive Courses

First Course

Title: Environmental Interpretation
Hours: 4 quarter
Texts: Sharpe; Tilden; assigned readings.

Course Description:
This course is designed to introduce the student to the profession of interpretation and to provide the foundation for further course work in interpretation. The goals of this course are to have students gain an understanding of the principles of interpretation and their applications in interpretive services in a wide variety of settings (such as museums, zoological gardens, industrial sites, and parks).

BEMIDJI STATE UNIVERSITY (continued)

Course Requirements:
Four essay quizzes, a final exam, and 3 projects (interpretive writing, sign or poster, and interpretive vignette) involving application of interpretive principles.

Second Course

Title: Seminar in Interpretation
Hours: 3 quarter
Texts: Sharpe.

Course Description:
This is a new course; the syllabus is currently under development.

Third Course

Title: Introduction to Environmental/Outdoor Education
Hours: 4 quarter
Texts: Leopold; McInnis and Albrecht; Storer.

Course Description:
Objectives, program ideas, methods and materials of outdoor education. General and specific techniques of implementing a program of Environmental/Outdoor Education.

Fourth Course

Title: Field Experience in Environmental/Outdoor Education
Hours: 4 quarter
Texts: Hammerman and Hammerman.

Course Description:
An interdisciplinary field oriented course designed to provide the student with basic knowledge of the natural environment and its relationship to the total school curriculum. Each student will design and execute an environmental or outdoor education project related to their major field of study. Arrangements will be made to test out the activity on an appropriate group (e.g. school children, adults, etc.). The course is not intended for Biology majors or minors.

UNIVERSITY OF SOUTHERN MISSISSIPPI

C. Newton Wilkes
Dept. of Recreation
Southern Station Box 5123
University of Southern Mississippi
Hattiesburg, MS 394015-1123
(601) 266-5575

Interpretive Curriculum

The B.S. and M.S. degrees are offered at the University of Southern Mississippi, which is on the semester system. An emphasis specifically in Interpretation is not available. Curriculum emphasis areas offered are: Community/Municipal Recreation; Outdoor Recreation/Resources Management; Therapeutic Recreation; and Leisure Services. The course in interpretation offered is described below.

Interpretive Facilities

Interpretive classes are responsible for trail design and interpreting the environment a nearby camping area, and students provide some interpretive services at other areas near campus. Indian mounds, museums, and other natural areas near bluffs, rivers, and the Gulf of Mexico are close enough for a field experience. Lab space is available.

Interpretive Course

Title: Interpretation of Cultural and Natural Resources
Hours: 3 semester
Text: Lewis; Sharpe.

Course Description:
A study of the professional interpretation of cultural and natural resources with emphasis on the philosophy, methods, and techniques of interpretation for recreational and educational purposes in recreational settings. Approximately 20 students (29% juniors, 70% seniors, 1% graduate students) majoring in Parks and Recreation enroll in this course each semester.

Course Requirements:
At least 3 tests; development of an interpretive program, including brochures; a term paper on interpretive programs and facilities; compilation of a notebook on various interpretive aspects; usually, at least 5 class presentations are required on various selected interpretive subjects; each semester the class is involved in some project requiring outside work of designing and interpreting trails and/or other natural resources within the city of Hattiesburg, or a nearby community.

UNIVERSITY OF MISSOURI - COLUMBIA

Glenn Weaver
617 Clark Hall
Dept. of Recreation and Park Administration
University of Missouri - Columbia
Columbia, MO 65211
(314) 882-7086

Interpretive Curriculum

The B.S. and M.S. degrees in Park Programs and Operations are offered at the University of Missouri - Columbia, which is on the semester system. Undergraduate professional preparation in this department consists of four basic categories: a professional core (22 credit hours), applied knowledge and skills (22 credit hours), an area of concentration (15 credit hours), and field internship (12 credit hours). Each student completes at least one area of concentration from a choice of four areas: leisure service management, youth services, park programs and operations, and therapeutic recreation. The interpretation course is offered in the specialization of park programs and operations. A minimum of 18 credit hours of professional recreation courses must be completed in residence at UMC. The internship program gives the student the opportunity to put theory into practice and provides the important experience of practical on-the-job training with qualified supervisors who are dedicated to high standards and willing to assist in the training of future professionals.

Interpretive Facilities

Nearby interpretive facilities include: Museum of Art and Archaeology, Museum of Anthropology, Rockbridge State Park (within 3 miles), and Hinkson Creek Recreation Area (on campus lands).

Interpretive Course

Title: Principles of Interpretive Outdoor Recreation
Hours: 3 semester
Texts: Tilden.

Course Description:
Interpretive principles and techniques employed to communicate values, natural history, and cultural features to the recreation user. Major course objectives are:

1) to acquaint the student with fundemental terminology relating to the interpretive recreation concept;

2) to acquaint the student with the values of interpretation as a source of individual fulfillment and as a management tool;

UNIVERSITY OF MISSOURI - COLUMBIA (continued)

3) to introduce the student to the knowledge and skills needed to prepare, develop, and evaluate manipulative materials as well as appropriate instructional strategies to be used with these materials in providing outdoor recreational education experiences, and,

4) to help the student develop an understanding of the principles of interpretive outdoor recreation.

Approximately 30 students (20% sophomores, 40% juniors, and 40% seniors) majoring in Parks and Recreation (80%), Wildife (10%), and Forestry (10%), enroll in this course each semester.

Course Requirements:

Individual and group projects are selected from the following: Self-Directed Materials (self-guided brochure, topical study guides, audio tapes); Conducted Activities (guided walks, campfire talk); Media Materials (exhibits/displays, slide tape).

UNIVERSITY OF MONTANA

Joseph A. Mussulman
School of Forestry
University of Montana
Missoula, MT 59812

Interpretive Curricula

The B.S degree in Recreation Management, Resource Conservation, and Environmental Studies is offered at the University of Montana, in addition to the M.S. and Ph.D. degrees. The University of Montana is on the semester system. This department does not have a major emphasis, and thus no specific curriculum, in interpretation. However, curricula are available in Recreation Resources Management, Forest Resources Management, and Resource Conservation.

Interpretive Facilities

The campus radio and television studios are used in the interpretation course; Instructional Materials Services; and resource personnel from the USFS Region I Office in Missoula, from the Lolo National Forest, and from other agencies such as the Campfire Program. In addition, field trips are scheduled to Glacier or Yellowstone National Parks, the National Bison Range, Grant-Kohrs Ranch, Cataldo Mission in Idaho, or various other local and state museums and historic sites, all within four hours' drive of Missoula.

Interpretive Course

Title: Principles of Interpretation of Recreation Areas
Hours: 3 quarter
Texts: Fazio and Gilbert; Grater; Kodak(a); Tilden.

Course Description:

This is a practical introduction to a few of the skills, techniques, and materials useful to professional and incidental interpreters. Distinctions are drawn between information and interpretation, and the latter is defined by a simple set of principles serving as guidelines. Practice is gained in informational and interpretive writing, formal and informal writing and performance for radio and television, and the preparation and presentation of illustrated interpretive programs for children and adults. Approximately 15 students (30% juniors, 40% seniors, 30% graduate students) majoring in Parks and Recreation (70%), Wildlife (10%), and Conservation (10%) enroll in this course each quarter.

UNIVERSITY OF MONTANA (continued)

Course Requirements:

Writing: a news release, a public service announcement, and a prospectus for a large-scale interpretive program. Performance: broadcast a public service announcement, conduct an interview on television, prepare and deliver a five-minute interpretive program for children, prepare and present a 10-15 minute illustrated interpretive talk for adults. Prerequsite: one course in writing and one course in ecology or other environmental study.

UNIVERSITY OF NEW HAMPSHIRE

Robert Greenleaf
Dept. of Recreation and Parks
227 Hewitt Hall
Durham, NH 03824
(603) 862-2391

Interpretive Curriculum

The B.S. degree is offered in the Department of Recreation and Parks of the University of New Hampshire, which is on the semester system. Students in this department enroll in one of three options: Resource Management, Administration, or Programming. Students who decide to pursue careers in park interpretation and environmental education--in the public or private sector--may take a specialization in interpretation. Students selecting to take this option need to, and are expected to, develop competencies in one or more areas of the sciences (i.e., Botany, Geology, Zoology, Plant Science, etc.). Students who wish to take this specialization should consider doing an independent study in interpretation during their senior year.

Interpretive Facilities

None at the University of New Hampshire; several available nearby.

Interpretive Course

Title: Interpretation/Environmental Education
Texts: Columbe, Worth, Mawson, and Artz; Odiorne Point Natural Science and Historical Studies; and others.

Course Description:

This course is a unique blend of theory and practical application, designed for upper class students who wish to pursue an interest in interpretation/environmental education. After a series of workshops and seminars to introduce philosophy, concepts, and methods, students will apply the theoretical knowledge by participating in "Through the Looking Glass," a marine awareness program for elementary and high school students at the Nature Center, Odiorne Point State Park, Rye, NH.

Course goals and objectives are to: acquaint the student with basic principles and roles of various interpretive services and methods; provide the student an opportunity to visit selected interpretive facilities; direct the student in planning, development, and presentation of interpretive programs; encourage the students to interact with practitioners in the field; and develop student skills useful for interpretation. Approximately 5-10 students (juniors and seniors) majoring in Parks and Recreation (60%), Conservation (40%), and Forestry (10%) enroll in this course each semester. As this course evolves, other departments may participate.

UNIVERSITY OF NEW HAMPSHIRE (continued)

Course Requirements:

Four field trips, preparation and presentation of one interpretive project, and two exams. At the conclusion of this course, students should be able to: express a personal philosophy for interpretation/environmental education; identify the support resources available for interpretation/ environmental education, and; carry out with minimal supervision the planning, execution and evaluation of one session (e.g., slide shows, talks, field programs, etc.) as part of the three-hour program.

NEW MEXICO STATE UNIVERSITY

S.D. Schemnitz
Dept. of Fisheries and Wildlife Science
New Mexico State University
Box 4901
Las Cruces, NM 88003
(505) 646-1136

Interpretive Curriculum

The B.S. and M.S. degrees are offered at New Mexico State University, which is on the semester system. The Department of Fisheries and Wildlife Sciences at New Mexico State University offers suggested options in a variety of resource fields related to management of wild populations and their habitats, including Interpretive Natural History. In this option, courses are selected from the departments of Biology, Geology, and Fishery and Wildlife Science. There is no course offered specifically in interpretive techniques, however.

UNIVERSITY OF NEW MEXICO

S. Rubio
J. 112D
Recreation Program
University of New Mexico
Alberqueque, NM 87131

Interpretive Curriculum

The B.S., M.S., and Ph.D. degrees are offered at the University of New Mexico, which is on the semester system.

Interpretive Course

Title: Interpretive Services in Outdoor Recreation Areas
Hours: 3 semester
Text: Sharpe.

Course Description:
Course objectives are:

1) to acquaint the student with basic principles and roles of various interpretive services and methods
2) to provide the student an opportunity to visit, observe, and evaluate selective interpretive services and programs of private and governmental interpretive facilities
3) to provide the student an opportunity to plan, develop, and present an interpretive program of his/her own on a specific subject or area
4) to provide an opportunity for the student to become acquainted/interact with practitioners in the field of interpretation
5) to provide the student an opportunity to learn and develop skills (use of audio/visual equipment, writing, and photography) in planning and developing interpretive programming and services.

Approximately 15 students (juniors, seniors, and graduate students) majoring in Parks and Recreation, Biology, and other majors enroll in this course each semester.

Course Requirements:
Requirements include field trips, exams, and an individual interpretive project.

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STATE UNIVERSITY OF NEW YORK - CORTLAND

Chair
Recreation Education Department
P.O. Box 2000
State University of New York - Cortland
Cortland, NY 13045
(607) 753-4941

Interpretive Curricula

The Department of Recreation Education offers three major programs that combine professional studies in specific interest areas with practical field work experience. The areas of therapeutic recreation, municipal recreation, and outdoor education and recreation are covered in the College's programs. The Bachelor of Science in Recreation degree program affords students the opportunity to study in liberal arts as well as in recreation. The Bachelor of Science in Education (B.S.E.) degree in Recreation, with concentrations in Recreation or Nature Recreation and Interpretation (NRI), leads to qualification for provisional certification to teach Recreation as a special subject area. The M.S. in Recreation, and M.S.E. with specialization in Recreation Education, are also offered.

The B.S.E.(NRI) trains interpretive and outdoor/nature-oriented specialists by offering a strong background in the physical and biological sciences. Qualification for provisional certification to teach recreation as a special subject area in the State of New York may be granted to those who complete this program.

Majors in recreation spend one full semester in a practicum with eight-week assignments in two different areas. (NRI majors have one assignment.) A summer outdoor education practicum at the College's Outdoor Education Center at Raquette Lake in the Adirondacks is required and a winter outdoor education practicum there is optional.

Interpretive Facilities

Raquette Lake Outdoor Education Center (Adirondacks), Brower Campus (Albany area), Hoxie Gorge (Cortland area), and NSF-funded laboratory vans.

Interpretive Course

Title: Nature Recreation
Hours: 3

Course Description:
Juniors-graduates majoring in Parks and Recreation and Biology enroll in this course.

STATE UNIVERSITY OF NEW YORK - DELHI

Thomas Ostrom
Rm 154 Farnsworth Hall
Parks and Recreation Management Program
State University of New York at Delhi
Delhi, NY 13753

Interpretive Curriculum

The A.S. degree in Parks and Recreation Management is offered at SUNY-Delhi, which is on the semester system. A major in interpretation is not offered.

Interpretive Facilities

Nearby interpretive facilities include a 200-acre forest (used as an outdoor lab) and lab space with drafting equipment.

Interpretive Course

Title: Parks and Recreation Interpretive Techniques
Hours: 4 semester

Course Description:
Principles, techniques, and procedures in the design, programming, and operation of interpretive facilities such as nature trails and interpretive centers. Approximately 25 sophomores majoring in Parks and Recreation enroll in this course each semester.

Course Requirements:
Term paper, oral report, 14 lab assignments, 3 hourly exams, book review, and classroom quizzes.

STATE UNIVERSITY OF NEW YORK - SYRACUSE

David L. Hanselman
Professor of Environmental Education/Communications
School of Landscape Architecture
State University of New York - Syracuse Campus
Syracuse, NY 13210

Interpretive Curriculum

The college of Environmental Science and Forestry offers an interdisciplinary graduate program (Graduate Program in Environmental Science) with a major area of concentration in "Environmental Communications." This concentration recognizes four lead categories:

(1) Environmental Education and Interpretation
(2) Environmental Journalism and Media
(3) Public Participation
(4) Environmental Meditation

While this department does not profess to offer an interpretive degree per se, many gradate students pursue appropriate courses and internships to eventually seek and find employment in natural history interpretation. At the undergraduate level, we offer a Bachelor of Science in Environmental Studies: one of the concentration areas (only 18 hours) in this program allows students a broad option of courses and some elect science courses to strengthen their skills in interpretation. At neither the graduate nor the undergraduate level do we offer a field natural history course or a course in interpretation. We do, however, have many courses in biology, communications, education, sociology, urban design, etc., which provide both technical background and communication skills.

NORTH CAROLINA STATE UNIVERSITY

Beth E. Wilson
4008 Biltmore Hall
Dept. of Recreation Resource Administration
North Carolina State University
Raleigh, NC 27650
(919) 737-3276

Interpretive Curriculum

The B.S., M.S., and M.R. degrees in Recreation Resources Administration are offered at North Carolina State University, which is on the semester system. The Interpretive Concentration includes 9 credit hours of required courses (Introduction to Instructional Media or Communication Methods and Media, Recreation and Parks Interpretive Services, and Basic Principles of Interpersonal Communications) and 15 credit hours selected from a wide variety of elective courses.

Interpretive Facilities

All AV and VTR equipment available in the department; three state museums (art, history, and natural history) available within 2 miles of campus; state park and state forests within 10 miles of campus; nuclear power plant within 15 miles; and many natural and historic sites are readily accessible to us. Also accessible are several labs are used for field trips.

Interpretive Course

Title: Recreation and Park Interpretive Services
Hours: 3 semester
Texts: Sharpe; Van Matre.

Course Description:

The principles and practices of environmental and historical interpretation are studied, and both personal and non-personal interpretive communication techniques are critically examined. Also studied are comprehensive planning and implementation of interpretive programs, and equipment and facilities used in environmental and historical interpetation. Approximately 20 students (30% juniors, 66% seniors, 3% graduate students), majoring in Parks and Recreation (90%), Wildlife (5%), and Forestry (5%) enroli in this class each semester.

Course Requirements:

Individual interpretive presentations (oral), including a written interpretive plan on; group project (the class serves as faculty for a 3-week outdoor education camp for 270 7th graders; two written exams; 3-hour lab/week.

WESTERN CAROLINA UNIVERSITY

Russel E. Bachert, Jr.
Parks and Recreation Management Program
Western Carolina University
Cullowhee, NC 28723
(704) 227-7437

Interpretive Curriculum

The B.S. degree in Parks and Recreation Management is offered at Western Carolina University, which is on the semester system. All students complete a major core of courses, of which four are required in interpretation: Natural History of Southern Appalachia, Interpretation of Cultural Resources, Management of Natural and Cultural Resources, Conservation of Natural Resources, Principles of Sociology, Man and Culture, and Public Speaking.

Interpretive Facilities

Mountain Heritage Museum, Highlands Biological Museum, Center for Improvement of Mountain Living, Appalachian Wilderness Collection, Center for Environmental/Energy Education, Cooperative Park Studies Unit, Southern Appalachian Research-Resource Management Cooperative, Business Curriculum Laboratory, Camper College, Child Development Center, Instructional Media Services Center, Learning Resource Center, Special Services, Writing Lab, and others.

Interpretive Course

Title: Interpretation of Cultural and Natural Resources
Hours: 3 semester
Texts: Alderson and Low; Sharpe.

Course Description:
Evolution of the field of interpretation; instruction and practice in the techniques of signing; producing and presenting interpretive materials and programs to the public; evaluation of commercial and self-made interpretive resource materials; employment opportunities. Two lecture and two laboratory/discussion/demonstration hours. Approximately 15 students (juniors in Parks and Recreation) enroll in this course each semester.

Course Requirements:
30-hour lab requirement in the Mountain Heritage Center; develop an interpretation file of teaching materials; attend a conference/workshop in the field; develop and lead an environmental education program at the American Forestry Spring Conservation Retreat; select, develop and execute a special project.

UNIVERSITY OF NORTH DAKOTA

Dale A. Anderson
HPER Dept., Recreation Division
University of North Dakota
Grand Forks, ND 58202
(701) 777-2978

Interpretive Curriculum

The B.A., B.S., M.A., M.S., and M.E.D. degrees are offered at the University of North Dakota, which is on the semester system. Specialization area in Outdoor Recreation in the Department of HPER offers one course in interpretation. Required courses in that specialization include: Camping and Outdoor Activities, Outdoor Recreation Programs and Planning, and Environmental Interpretation. (Proposed courses not yet approved, as of Fall 1982, include: Ethics and Safety, and Resources Management).

Interpretive Facilities

Shared department equipment; several centers, parks, and other facilities available to the university community.

Interpretive Course

Title: Environmental Interpretation
Hours: 3 semester
Texts: Sharpe; Tilden; others on reserve.

Course Description:
The principles, methods, and materials of interpretive naturalist programming for recreation personnel. Goal: to develop techniques and expertise in interpreting environments to others. This is a new course; estimates of academic level of participating students are 20% juniors, 60% seniors, 20% graduate students, majoring in Parks and Recreation (80%), Education (10%), Biology (5%), and Wildlife (5%).

Course Requirements:
Three critiques of local interpretive media; design a self-guided nature trail; write a script for a slide-tape interpretive program; data collection for a local plant and animal; give an interpretive talk; midterm and final exams.

FINDLAY COLLEGE

Dwight Moody, Richard Phillips
Division of Natural Science
Findlay College
Findlay, OH 45840
(419) 422-8313

Interpretive Curriculum

The B.A. and B.S. degrees in Nature Interpretation are offered at Findlay College, which is on the semester system. Required courses for the Nature Interpretation degree include: General Botany I, General Zoology I and II, Environmental Studies, Ornithology, Entomology, Field Botany, Nature Interpretation, General Ecology, Field Experience, Special Investigations, Naturalists' Seminar, Cultural Anthropology, Drawing I, Business Communications, Physical Geology, Photography I, Astronomy, Principles of Speech, and Elementary Statistics. General Degree Requirements include: Fine Arts (6 hours), Humanities (6 hours), and Natural Science (6 hours).

Interpretive Facilities

On campus: Zoology, Botany, Environmental Studies/Ecology labs and necessary equipment; Greenhouse and Planetarium; and a Nature Center. Off campus: Biological field station agreement with Hancock County Parks District, Findlay, Ohio.

Interpetive Courses

First Course

Title: Environmental Studies
Hours: 3 semester
Texts: Houston.

Course Description:
This course is designed especially for the Interpretive Naturalist major, offering the student field studies in the environment to develop necessary background in understanding the environment and valuable insight into the multi-faceted problems associated with maintaining a stable, natural environment. Approximately 20 students (70% freshmen, 15% sophomores, 5% juniors, 5% seniors) majoring in Education (30%), Biology (20%), and other subjects (30%) enroll in this course, which is taught one semester each year.

Course Requirements:
Several quizzes, a mid-term and final exam; field and lab work.

FINDLAY COLLEGE (continued)

Second Course

Title: Nature Interpretation
Hours: 3 semester
Texts: Van Matre(c); selected readings.

Course Description:
The objectives of this course are for the student to: gain an understanding of, and an appreciation for, the role of an interpretive naturalist; begin the development of knowledge and skills which will be necessary for naturalist work; actively perform some of the duties and assignments of an interpetive naturalist; and explore the field of nature interpretation in relation to personal goals and philosophy. This course is offered once every other year; approximately 6 students (90% juniors, 10% seniors) majoring in Nature Interpretation enroll in this course.

Course Requirements:
Individual projects include: readings; development of a natural exhibit; presentation to a Science Seminar; presentation to another group; set up a nature trail and guide a junior high group through it as a field naturalist; work in an overnight camping situation (may involve two nights) with one of the local elementary schools; quizzes, class discussions, labs, and field trips; critiques of environmental publications; compile a book list. Group projects include the development of: brochure design and a nature presentation; a "Nature Interpretation" newsletter; and a one-page flyer to advertise their services as interpretive naturalists.

Third Course

Title: Naturalists Seminar
Hours: 1-3 semester
Texts: outside readings.

Course Description:
The students study issues in ecology; i.e., man in terms of competition vs. adjustment relative to world goods, energy supply, life space, environmental contamination, religion, etc., in national and international scope. Approximately 6 seniors, majoring in Nature Interpretation, enroll in this course, which is taught every third year.

Course Requirements:
One term paper, two journal articles and oral reports, attendance and participation in discussion sessions. There is one prerequisite biology course.

FINDLAY COLLEGE (continued)

Fourth Course

Title: Field Experience Practicum
Hours: 1-6 semester
Texts: none.

Course Description:
A practical, experience-oriented activity in which students work with professionals in the areas of natural resource: naturalists, park rangers, conservationists, and ecologists. Approximately one senior, majoring in Nature Interpretation, enrolls in this course each semester.

Course Requirements:
Prerequisite: 12 hours of nature interpretation. Student's individual responsibilities are determined by the field supervisor.

Fifth Course

Title: Special Investigations
Hours: 1-5 semester
Texts: none.

Course Description:
The first segment of this course is an individual research project which can be accomplished in 6 or 7 weeks. The second segment is a Nature Center Operation and Display, in which the student assists with the operation of a Nature Center, and constructs a display. Approximately 2 students (50% juniors, 50% seniors) majoring in Nature Interpretation enroll in this course each semester.

Course Requirements:
Completion of a written report, and a 30-45 minute presentation of the investigation results in a Science Seminar.

Sixth Course

Title: Entomology
Hours: 3 semester
Texts: Borror and White; Elzinga.

Course Description:
This course is specifically designed for the major in Nature Interpretation. It is a combination of classroom, lab, and field work, the majority of the lab and field work will be done individually. The student builds an exemplary insect collection. Approximately 12 students (10%

FINDLAY COLLEGE (Continued)

freshmen, 60% sophomores, 20 % juniors, 10% seniors) majoring in Nature Interpretation (90%), Biology (5%), Education (4%), and other subjects (1%) enroll in this course, which is taught one semester every other year.

Course Requirements:
Several quizzes; lab, class, and field assignments; midterm and final exams; insect collection with at least 100 different insects.

Seventh Course

Title: Ornithology
Hours: 3 semester
Texts: Pasquier; Peterson.

Course Description:
While this course is intended for Nature Interpretation majors, it should fulfill a need for people in elementary and secondary education. This field course on the birdlife of northwestern Ohio is intended to provide a broadening experience and to provide some knowledge of ecology and the environment. Approximately 15 students (60% sophomores, 30% juniors, 10% seniors) majoring in Nature Interpretation (80%), Biology (15%), and other subjects (5%) enroll in this course, which is taught one semester every other year.

Course Requirements:
Six quizzes, a journal, and a final exam. Some weeks all the work will be concentrated in an all-day field trip.

Eighth Course

Title: Field Botany
Hours: 4 semester
Texts: Harlow (a&b); Newcomb.

Course Description:
This course is designed specifically for Nature Interpretation majors, but lends itself readily to the field of general education. It is taught entirely outdoors in woods, along roadsides, and in old fields. During the course, students learn to identify all the woody vines, trees, and shrubs of Hancock County. In addition, they learn to identify the wildflowers of late summer and autumn, and several dozen species of weeds. Students also learn to "key out" all the species of conifers in our area, and, after leaf fall in the autumn, they learn to recognize the deciduous trees by the appearance of buds and various characteristics of the stem. Approximately

FINDLAY COLLEGE (continued)

12 students (50% sophomores, 30% juniors, 20% seniors) majoring in Nature Interpretation (80%), Biology (15%), and other majors (5%) enroll in this course, which is taught one semester each year.

Course Requirements:

Students will be required to make an herbarium collection that will include the leaves and stems of all the woody plants of the area, 25 species of summer wildflowers, and 40 species of weeds. Testing will consist of two practical examinations each on woody plants, wildflowers, and weeds. There will be additional testing in the field.

KENT STATE UNIVERSITY

Laurel Wilcox
Recreation Unit
Kent State University
Kent, OH 44242
(216) 672-2015

Interpretive Curriculum

The B.S. degree in the School of Physical Education, Recreation, and Dance is offered at Kent State University, which is on the semester system. Areas of concentration offered within the Recreation major are Community Related, Outdoor Related, and Therapeutic. The interpretive course listed below, Outdoor Education and Interpretive Services, is required of all Recreation majors. Requirements for the degree are as follows:

General School Requirements	30-31 hours
General Department Requirements	4 hours
Major Requirements	63 hours
Concentration	20 hours
Electives	11-12 hours
Total	129 hours

Interpretive Facilities

Outdoor lab; various equipment that includes compasses, lenses, dip-nets, seins, microscope, increment borer, soil thermometer, etc.

Interpretive Course

Title: Outdoor Education and Interpretive Services
Hours: 2 semester
Texts: no texts required, however there are a number of related readings.

Course Description:
Experience in developing knowledge and awareness of ecological approach to nature, and in planning and implementing interpretive services in natural and cultural environments. Emphasis is on using five tools (senses) to explore, discover, and study. We do not stress botanical and zoological names, families, etc. in this course: it is an awareness and understanding approach. Approximately 35 students (70% sophomores, 28% juniors, 2% seniors), majoring in Parks and Recreation (70%), Education (15%), and other majors (15%), enroll in this course each semester.

KENT STATE UNIVERSITY (ontinued)

Course Requirements:

This course is operated on a contract basis. A written final exam is required of all students, plus a choice of assignments from the following:

- class participation
- participation in an all-day practicum
- develop an outdoor education teaching tool and present it to the class
- read and summarize 5 articles dealing with outdoor education or school camping
- read and write a review of at least two books dealing with outdoor education
- develop an outdoor activity unit for a special population or unique facility
- outdoor school volunteer
- plan and present a 20-minute outdoor education lesson to the class

THE OHIO STATE UNIVERSITY

Gary W. Mullins, Rosanne Fortner, Mary Lynne Bowman, and Clint Shepard
School of Natural Resources
Rm. 383, 2021 Coffey Rd.
The Ohio State University
Columbus, OH 43210
(614) 422-5589

Interpretive Curriculum

The B.S. and M.S. are offered in the School of Natural Resources; a Ph.D. in Education with a specialization in Interpretation is available. The Ohio State University is on the quarter system.

Interpretive Facilities

The School of Natutral Resources is housed in a new multimillion dollar facility that contains audio visual labs, auto-tutorial labs, darkrooms, exhibit preparation lab, planning lab and various biological research labs. A 1300-acre resident environmental education center is also owned by the School. Numerous museums, state and metropolitan interpretive facilities as well as a limited number of federal facilities are available for field studies.

Interpretive Courses

First Course

Title: Work Experience in Interpretation
Hours: 3 quarter
Texts: none

Course Description:
This course allows students to earn university credit for professional work experience in interpretation or interpretive-related fields. Approximately 10-15 freshmen and sophomores majoring in Parks and Recreation and Environmental Interpretation enroll in this course each summer.

Course Requirements:
Students participating in this course are required to submit a written report following the quarter in which they worked.

Second Course

Title: Natural Resources Interpretation/Education Program Development in the Urban Setting
Hours: 3 quarter
Texts: Ryan; Bowman and Coon.

THE OHIO STATE UNIVERSITY (continued)

Course Description:
This course emphasizes field experience in planning and implementing natural resources interpretation programs/projects in an urban community. In addition to class lecture-discussions, the course features a series of field trips to urban interpretive sites in the area. Approximately 25-30 juniors and seniors enroll in this course, which is taught one quarter each year.

Course Requirements:
Field projects in an urban setting, oral report, and term paper.

Third Course

Title: Natural History of Ohio
Hours: 5 quarter
Texts: Columbus Metro Parks; Lafferty.

Course Description:
The course provides students with a broad overview of the interrelationships of Ohio's animals and plants and non-living components, and the various natural processes and factors influencing these interrelationships and processes. Approximately 30-40 juniors, seniors, and graduate students enroll in this course, which is offered one quarter each year.

Course Requirements:
A comprehensive, natural history plot-study may be required. Lab projects are given on all aspects of natural history.

Fourth Course

Title: Environmental Interpretation Methods
Hours: 5 quarter
Texts: Sharpe; Tilden; assigned handouts.

Course Description:
This course, which is a prerequisite for all other OSU interpretive courses, covers topics including the concept of interpretation, roles of the interpreter, basic interpretive principles, visitor characteristics and the range of interpretive services. Lecture-discussion-application subjects range from philosophical and historical foundations of interpretation, through resource, visitor, and management considerations, to practical and pragmatic implementations of interpretive theory and techniques. Approximately 100 students (sophomores, juniors, seniors, and graduate students) enroll in this course, which is taught two quarters each year.

THE OHIO STATE UNIVERSITY (continued)

Course Requirements:

Students enrolled in this course are exposed to lecture-discussions presented by faculty of the OSU divisions of Environmental Education and Parks and Recreation Administration, to professional guest-speaker presentations, to site visits at several nearby public interpretive sites and to prepared video programs, slide talks, multi-media presentations and publications. The students are responsible for assimilating this material and for generating a series of formal interpretive programs and publications for presentation to the class.

Fifth Course

Title: Interpretive Planning and Center Design
Hours: 5 quarter
Texts: Cherem; Hanna; Manly; Sharpe.

Course Description:

The course features practice in interpretive master planning and center design; case studies of public/private interpretive sites/facilities; and an investigation of visitor services (visitorship considerations and integration with the natural environment). Approximately 20-25 juniors, seniors, and graduate students enroll in this course, which is taught one quarter each year.

Course Requirements:

Students participate in actual planning and design exercises in cooperation with local interpretive sponsoring agencies. Plans and reports are generated for transmittal to those agencies.

Sixth Course

Title: Interpretive Exhibit Preparation
Hours: 5 quarter

Course Description:

This course covers the design, construction, and evaluation of active, visitor-involvement exhibits for use in public and private interpretive centers. Class discussions and professional guest lectures complement construction sessions that are held in the Exhibit Preparation Labs. Approximately 25-35 juniors and seniors enroll in this course which is taught one quarter each year.

Course Requirements:

Students prepare one exhibit technique paper, plan a table-top exhibit, construct a model, and build and evaluate an exhibit. Students also present their planning rationale and project to a panel of reviewers.

THE OHIO STATE UNIVERSITY (continued)

Seventh Course

Title: Interpretive Field Studies
Hours: 2 to 5 quarter
Texts: none.

Course Description:
A short course, inter-session course, or study tour involving extensive travel to regional or national interpretive facilities. This course is designed to provide opportunities for the application of interpretive principles and theory to the analysis and evaluation of working interpretive facilities. Approximately 14-18 juniors, seniors, and graduate students enroll in this course, which is taught one quarter each year.

Course Requirements:
A report covering the students' in-depth analysis of each facility is due upon return from the trip.

Eighth Course

Title: Interpretive Programming
Hours: 5 quarter

Course Description:
This course includes case studies of public and private interpretive programs, practice in program presentation, and comprehensive program planning. Approximately 20-30 juniors, seniors, and graduate students enroll in this course, which is taught one quarter each year.

Course Requirements:
Course entails planning a program series (three month period) for a local park: tasks include extensive personal services training before video camera, exercises in interpretive writing, and one presentation for the general public in a zoo, park, museum, etc.

Ninth Course

Title: Parks and Recreation Administration Study Tour (Interpretation)
Hours: 2 to 5 quarter hours

Course Description:
This course provides the opportunity for students interested in interpretation and visitor services to participate in the annual University

THE OHIO STATE UNIVERSITY (continued)

Consortium for Interpretation. This involves both on-site visits and interaction with interpretive professionals. Approximately 14-15 juniors, seniors, and graduate students enroll in this course each spring quarter.

Course Requirements:
A written report is submitted and oral reports are made at study sites.

Tenth Course

Title: Environmental Education in the Park Setting
Hours: 3 quarter
Text: Columbus Metro Parks

Course Description:
This course covers the use of public park facilities and services in accomplishing environmental education objectives. It is offered in cooperation with local park agencies. Approximately 20-25 juniors and seniors enroll in this course, which is taught one quarter each year.

Eleventh Course

Title: Skills for Environmental Communications
Hours: 5 quarter
Texts: Fazio and Gilbert.

Course Description:
This course emphasizes skills development and practice in communicating natural resource/environmental information through written and broadcast media. Approximately 25-30 juniors, seniors, and graduate students enroll in this course, which is taught one quarter each year.

Course Requirements:
Students are required to develop an article for a periodical, a set of transparencies, a slide-tape presentation, a videotape program, and a personal presentation.

Twelfth Course

Title: Internship
Hours: 6 quarter
Texts: none

Course Description:
This course involves a minimum of three months of gainful employment in interpretation and is arranged with cooperating natural resource or

THE OHIO STATE UNIVERSITY (continued)

environmental agencies, organizations, or industries. Approximately 20-25 juniors and seniors enroll in this course, which is offered one quarter each year.

Course Requirements:
Students submit internship reports during the quarter following that in which they worked.

Thirteenth Course

Title: Winter Activities in Environmental Education
Hours: 3 quarter
Texts: Stokes.

Course Description:
This course demonstrates a variety of interpetive activities appropriate to the winter season, prepares interpreters to present winter programs and helps interpreters develop the ability to plan and prepare their own winter materials. Approximately 15-20 juniors, seniors, and graduate students enroll in this course each, which is taught each winter quarter.

Course Requirements:
Students are required to plan, develop, present, and evaluate a 20-30 minute winter interpretive presentation.

Fourteenth Course

Title: Individual Studies in Interpretation
Hours: 2 to 5 quarter

Course Description:
Students participate in individualized interpretive study projects. Approximately 5-10 students (freshmen to graduate students) enroll in this course, which is offered one quarter each year.

Course Requirements:
Special readings or projects in historical interpretation, zoo interpretation, museology.

Fifteenth Course

Title: Interpretive Research and Theory
Hours: 5 quarter

THE OHIO STATE UNIVERSITY (continued)

Course Description:
This course includes analysis of the theoretical basis for interpretive technique, review of current research in environmental interpretation and exposure to models for evaluation of interpretive services. Approximately 15 graduate students enroll in this course, which is taught one quarter each year.

Course Requirements:
Term Paper, research project, extensive review of interpretive literature.

Sixteenth Course

Title: Individual Research
Hours: up to 15 quarter

Course Description:
Research for thesis or dissertation purposes. Approximately 5-7 interpretive graduate students enroll in this course each quarter.

SHAWNEE STATE COMMUNITY COLLEGE

David E. Todt
940 Second St.
Shawnee State Community College
Portsmouth, OH 45662
(614) 858-6053

Interpretive Curriculum

The Associate degree is offered at Shawnee State Community College, which is on the quarter system.

Interpretive Course

Title: Interpreting Nature for Children
Hours: 3 quarter
Texts: Cornell.

Course Description:

This course is intended to educate potential interpreters in the natural sciences and to provide them with nature interpretation techniques for classroom, school grounds, and outdoor use. Potential interpreters may be classroom teachers, education majors, recreation and park students, or youth leaders. Lecture and discussion hours are devoted to the scientific understanding of the natural environment around us. Laboratories are designed to involve all class participants in activities easily presented to children. Topics have been selected to provide a solid foundation of knowledge about the earth and the environment in which we live. Approximately 15 sophomores, majoring in Education (60%), Parks and Recreation (25%), and Biology (15%) enroll in this course, which is offered one quarter each year.

Course Requirements:

Each student is required to complete two interpretive projects to be presented to the class. These projects can range from a display on some aspect of nature to an interpretive slide show, or from an historical demonstration to an outdoor experience. Two experience papers are also required from each student. Each paper will report on the student's participation in an interpretive event outside of class. Attendance and class participation are also required.

THE UNIVERSITY OF TOLEDO

Steven L. Rank
Dept. of Recreation and Leisure Education
University of Toledo
2801 W. Bancroft
Toledo, OH 43606
(419) 537-2757

Interpretive Curriculum

The B.S. and M.S. degrees in Recreation are offered at the University of Toledo, which is on the quarter system.

Interpretive Facilities

Equipment, nearby museums and nature centers.

Interpretive Course

Title: Naturalist and Interpretive Services
Hours: 4 quarter

Course Description:
Lectures and laboratory exercises to analyze the role and skill of the park naturalist. Additionally, students will identify appropriate means of interpreting park features and facilities to the public. Approximately 20-25 students (juniors, seniors, and graduate students) enroll in this course each spring quarter.

Course Requirements:
Term papers, oral reports.

OKLAHOMA STATE UNIVERSITY

Lowell Caneday
School of HPELS
Oklahoma State University
Colvin Center Rm 107
Stillwater, OK 74078
(405) 624-5504

Interpretive Curriculum

The B.S., M.S., and Ed.D. degrees in Leisure Science are offered at Oklahoma State University, which is on the semester system. Course requirements are as follows:

General Studies requirement	43 hours
Departmental requirements	13 hours
Field of Concentration	64 hours
Leisure Sciences	21 hours
Human Development and Learning	6 hours
Sociology	3 hours
Leisure Program Area	19 hours
Specialization Area	15 hours
Electives	6 hours
Total	160 hours

Interpretive Facilities

Lake Carl Blackwell (OSU facility); state parks (Alabaster Caverns, Little Sahara, Pawnee Bill, etc.); National Recreation Areas (Chickasaw NRA, Platte N.P.); museums (Cowboy Hall of Fame, Gilcrease Museum, Woolaroc, etc.); and natural centers (Oxley Nature Center, Martin Park).

Interpretive Course

Title: Interpretive Services in Parks and Recreation
Hours: 3 semester
Text: Sharpe.

Course Description:
This course looks at the interpretive process and the role of the interpreter in park management and enhancing the visitor experience. Students have the opportunity to study: organization and administration of visitor centers and interpretive naturalist programs; philosophic approaches; and methods for interpreting the natural and cultural history of park and recreation areas. Approximately 10 students (50% seniors, 50% graduate students) majoring in parks and recreation (85%), forestry (10%), and wildlife (5%) enroll in this course each semester.

OKLAHOMA STATE UNIVERSITY (continued)

Course Requirements:

Oral and written book report; critique of an existing interpretive program; problem solving; development of an interpretive program; visits to several park and recreation areas with and without interpretive programs; others.

UNIVERSITY OF OREGON

Phyllis Ford
180 Esslinger
University of Oregon
Eugene, OR 97405
(503) 686-3396

Interpretive Curricula

The B.A., B.S., M.A., M.S., Ed.D., and Ph.D. degrees are offered at the University of Oregon, which is on the quarter system. Departmental programs include three options on the baccalaureate level (leisure service management, outdoor education and recreation, and services for special groups) and three options on the Master's level (recreation and park administration, recreation program and supervision, and recreation and park systems).

Interpretive Facilities

This department offers field trips to interpretive trails in old growth forest, valley habitat, and US Forest Service Visitor Information Service at Cape Perpetua.

Interpretive Course

Title: Environmental Interpretation
Hours: 3 quarter
Texts: Sharpe; Tilden; Watts; departmental materials.

Course Description:
Methods and materials in interpreting natural resources to the general public. Designed for students in park planning, outdoor recreation, and resource management. Approximately 40 students (seniors and graduate students) majoring in Parks and Recreation (90%), Education (5%), and Journalism (5%), enroll in this course each quarter.

Course Requirements:
Three field trips, designing a self-guided trail, writing a script for interpretive program, editing a proposed park guide, midterm and final exams.

THE PENNSYLVANIA STATE UNIVERSITY

Patricia Farrell, Head
Department of Recreation and Parks
267 Recreation Building
University Park, PA 16802
(814) 865-1851

Interpretive Staff
Jerold E. Elliott
G.R. "Corky" Potter
Thomas E. Willson

Interpretive Curricula

The B.S., M.S., M.Ed., Ph.D., and D.Ed. degrees are offered at Pennsylvania State University, which is on the semester system. Course requirements for the B.S. degree are:

Basic Communications	9 credits
Quantification	6 credits
Basic Natural Science	9 credits
Arts and Humanities	12 credits
Social and Behavioral Sciences	6 credits
Economics and Political Sciences	6 credits
Health Sciences	6 credits
Leadership and Programming	13 credits
Administration and Organization	13 credits
	82 credits

Interpretive Option

Fundementals of Interpretation	5 credits
Methods and Materials	9 credits
Concentration Area	26 credits
Minimum of 22 credits (at least 6 on the 400 level) from Department approved list in consultation with advisor to provide in-depth competency in a resource area such as, but not limited to, natural history interpretation, cultural history interpretation, or environmental education	
Internships	12 credits
	52 credits

Total required for degree.....132 semester credit hours

Interpretive Facilities

The Stone Valley Recreation Area is operated by the Penn State Recreation and Parks Department and offers a variety of programs for the general public. The Shaver's Creek Environmental Center is located here and boasts a staff which includes full-time specialists and interns from other colleges. The Center is less than 30 minutes from the campus and offers pre-intern experiences for undergraduate students in day and resident programming.

THE PENNSYLVANIA STATE UNIVERSITY (continued)

Interpretive Courses

Principles of Environmental Interpretation (3 credits)
Interpretation of cultural and natural history is introduced through a variety of instructional media.

Interpretive Materials Laboratory (3 credits)
Specialized equipment and techniques are used to prepare interpretive materials, displays, and AV presentations.

Natural History Interpretation (3 credits)
Emphasis on methods, techniques, and resources to acquire the knowledge and presentation skills necessary for leadership in the field. (Taught at Shaver's Creek Center.)

Cultural History Interpretation (3 credits)
Methods, skills and techniques necessary to the programming of historical sites and areas are learned and practiced with a variety of groups. (Taught at Shaver's Creek Center).

Environmental Education Methods and Materials (3 credits)
Methods and materials for developing and implementing environmental education programs with school, community and park settings are learned and utilized in a variety of settings.

SLIPPERY ROCK UNIVERSITY

Doris V. Parkman
Dept. of Parks and Recreation
Slippery Rock University
Slippery Rock, PA 16057
(412) 794-7503

Interpretive Curriculum

The Department of Parks and Recreation offers a flexible academic program designed to provide students with the opportunity to orient their studies to meet specific career goals. All programs lead to the Bachelor of Science in Recreation degree. Current offerings support academic studies in four options: Community Leisure Services, Interpretive Services, Recreation Resources Management, and Therapeutic Recreation Services. The Interpretive Services program is designed to educate park naturalists or historians for employment in national, state, local, and private interpretive areas and facilities. The M.S. in Recreation and M.Ed. in Environmental Education Administration degrees are also offered at this department. The M.Ed. program is designed to educate professionals capable of providing administrative service in the environmental education curriculum in school settings or the administration of local, state, or federal environmental education services.

Interpretive Facilities

Slippery Rock University (SRU) is a multi-purpose Pennsylvania State University with approximately 6,000 students. The University is uniquely situated to offer studies in parks and recreation: nearby federal, state and local park and recreation resources provide ample opportunity for practical experience. The following interpretive facilities are used at various times: Old Stone House (historical) - SRU; Jenning Environmental Education Center - DER of PA; Miller Place (archaeology site) - SRU, and; Outdoor Recreation Instructional Lab on campus.

Interpretive Courses

This department offers four junior and senior level courses within the option of Interpretive Services: Methods (approximately 50 students each semester); Planning (approximately 15 students each semester); Management (approximately 15 students each semester); and Analysis (approximately 10 students each semester). These courses are taken by majors in Parks and Recreation, and all require a combination of lab projects, oral reports, and term papers.

CLEMSON UNIVERSITY

H. Jesse Grove
Rm 227 Lehotsky Hall
Dept. of Recreation and Park Administration
Clemson University
Clemson, SC 29631
(803) 656-2180 or 656-3400

Interpretive Curriculum

The B.S. and M.R.P.A. degrees in Recreation and Park Administration are offered at Clemson University, which is on the semester system.

Interpretive Facilities

Facilities available at the University include lab space, three university administered historic sites, and one departmentally administered Revolutionary War fort site. Nearby facilities include: various state and national parks within 50 miles, one Duke Power Co. visitor center, three national forests within 50 miles.

Interpretive Courses

First Course

Title: Introduction to Environmental Interpretation
(Undergraduate - RPA 330)
Hours: 3 semester
Texts: Leopold; Shaara; Tilden.

Course Description:
An introduction to the philosophy and principles of the art of environmental interpretation. A comprehensive survey of interpretive theory as it applies to the recreation and parks practitioner and to the various settings within the profession. This is an introductary course, and as such is devoted to promoting an understanding of interpretive philosophy and theory.

Course Requirements:
Students will be given the opportunity to demonstrate their abilities through class participation, written reports, examinations, and other media.

CLEMSON UNIVERSITY (continued)

Second Course

Title: Methods of Environmental Interpretation
(Undergraduate/Graduate - RPA 431/631)
Hours: 3 semester
Texts: Lewis; Michener; Tilden.

Course Description:

This is an orientation course in the methodology of the art of environmental interpretation as it relates to the recreation and parks profession and its settings. The objectives of this course are to permit the student to: gain an understanding of the role of interpretive methodology within the total sphere of recreation and park administration; promote association with the scope, organization, and implementation of the broad range of interpretive methods and programs; develop skills in the planning and presentation of interpretive programs, exhibitry, and associated media; and formulate a perspective concerning the many sources of assistance and resources available to the interpreter.

Course Requirements:

There is one lecture-discussion period and one lab period per week during the semester. This is a course in methods, and much of the time is devoted to the development of personal skills in the art of interpretation. Students are given the opportunity to demonstrate their acquired skills through writings, oral/visual presentations, and other means. Grades are based upon class assignments and personal performance.

Third Course

Title: Historic Site Interpretation
(Undergraduate/Graduate - RPA 432/632)
Hours: 3 semester
Texts: Alderson and Low; Deetz; Streuver and Holton.

Course Description:

A study of the development and implementation of the specialized interpretive programs required at historic sites, including an overview of the historic movement in the United States and its presentation to the American people. Course objectives are to permit the student to: develop an awareness of the historic preservation movement in this nation and its significance to the American people; acquire the specialized knowledge and skills necessary in the interpretation of historic/archeologic sites and objects; develop a familiarity with the concepts and values of procedures necessary to the successful operation of historic/archeologic sites (e.g., security, conservation, visitor management, and site integrity); and, become competent in the training, utilization, and evaluation of interpreters of history.

CLEMSON UNIVERSITY (continued)

Fourth Course

Title: Introduction to Museology
(Undergraduate/Graduate - RPA 433/633)
Hours: 3 semester
Texts: Alexander; Neal.

Course Description:
An introduction to the museum concept with insight into current museum practices. Course will include principles and methods of museum practice including conservation/restoration techniques. Course objectives are to permit the student to: obtain a perspective regarding the evolution and changing role of the American museum; become familiar with the specialized functional problems inherent to the museum and visitor center (e.g., lighting, areas, climatic conditions and security); acquire a working knowledge of conservation/restoration techniques necessary in the preservation of historic artifacts; and, develop skills in the planning of museum displays, origin of galleries, effective use of color and lighting, and problems associated with visitors.

Fifth Course

Title: Principles of Environmental Interpretation
(Graduate - RPA 707)
Hours: 3 semester
Texts: Baskin; Dubos; Eiseley; Huth; Nash.

Course Description:
A comprehensive study of the concept and values of environmental interpretation, its significance to modern society, and its role in the recreation and parks field. Course objectives are to permit the student to: develop a comprehension of man's historic role in, and relationship with his environment; develop an understanding of the social, historical, and ethical foundations of interpretation, as well as the developmental principles of the art; formulate a concept of the role of the interpretive process and program within the total recreation and parks field; become familiar with the scope, organization, and implementation of the range and types of interpretive programs; and, provide the basis for the formulation of an "environmental ethic" by the professional administrator in recreation and parks.

UNIVERSITY OF TENNESSEE - KNOXVILLE

William E. Hammitt
Dept. of Forestry, Wildlife, and Fisheries
P.O. Box 1071
University of Tennessee
Knoxville, TN 37901
(615) 974-7126

Interpretive Curriculum

The B.S. in Forestry with an option in Forest Recreation is offered at the University of Tennessee at Knoxville, which is on the quarter system. Within the Forest Recreation option, students take one course in interpretation. The M.S. degree is also offered by the department.

Interpretive Course

Title: Interpreting Forest Resources
Hours: 3 quarter
Texts: Sharpe; Tilden.

Course Description:

This course covers: principles and techniques of interpreting environmental resources; importance of environmental interpretation to management of environmental resources; development and administration of interpretive services. Approximately 10 students (10% juniors, 80% seniors, 10% graduate students) majoring in Forestry (90%), and Wildlife or Recreation (in the Physical Education Department) (10%) enroll in this course each quarter.

Course Requirements:

Extensive reading, numerous field trips, and five projects: locate and flag (mark) a nature trail and five stations; prepare a trail bulletin for the five trail stations; give a 5-7 minute interpretive talk (indoor); conduct a guided walk with school children; and prepare an interpretive plan.

UNIVERSITY OF TENNESSEE - MARTIN

P.E. La ely
Dept. of Park and Recreation Administration
University of Tennessee
Martin, TN 38238

Interpretive Curriculum

The B.S. degree in Natural Resource Management is offered at the University of Tennessee - Martin, which is on the semester system. Available concentration areas are Commercial Recreation, Interpretation, Management, and Recreation. The interpretation option emphasizes effective communication of environmental and cultural features of natural resources for park visitors. Courses in this option include: general ecology, history of the United States, Methods of Interpretation I and II, dendrology, and ornithology.

Interpretive Course

Title: Interpretive Methods I
Hours: 3 quarter
Texts: Leopold; Sharpe; Tilden.

Course Description:
Introduction to principles and techniques used to communicate natural history, ecological features, and environmental awareness to park visitors. Includes methods of gathering, analysis, and presentation of information and planning, construction, and use of audio-visual equipment, exhibits, and related interpretive devices. Approximately 15-20 students (juniors) majoring in Parks and Recreation (93%), Wildlife (5%), and Biology (2%), enroll in this course each quarter.

Course Requirements:
Field trips will be scheduled when and where appropriate. Two exams will be given. Projects include storyboard cards, bulletin board, guided tour, and slide talk.

STEPHEN F. AUSTIN STATE UNIVERSITY

Mike Legg
School of Forestry
Stephen F. Austin State University
P.O. Box 6109
Nacogdoches, TX 75962
(409) 569-3301

Interpretive Curriculum

The B.S., M.S.F., M.F., D.F., and Ph.D. degrees are offered at Stephen F. Austin State University, which is on the semester system. The specialization of interpretation at this University is acquired through an individually tailored degree plan. Required courses in interpretation are Environmental Interpretation and Field Techniques in Environmental Interpretation.

Interpretive Facilities

AV production center for producing interpretive programs, Stonefort Museum on campus, Texas Forestry Museum (20 miles), Piney Woods Conservation Center (an environmental studies center of the University on Sam Rayburn Reservoir).

Interpretive Courses

First Course

Title: Environmental Interpretation
Hours: 3 semester
Texts: Sharpe.

Course Description:
This course covers: principles and techniques employed to communicate values, natural history, and cultural features to park visitors; and planning, construction and use of interpretive devices, museums, and related outdoor interpretive devices. Approximately 20 students (30% juniors, 50% seniors, 20% graduate students) majoring in Parks and Recreation (50%), Wildlife (25%), and Forestry (25%) enroll in this course each semester.

Course Requirements:
Develop and prepare camera-ready trail brochure, prepare a 6-10 minute sound and slide synchronized multi-projector show, prepare outline interpretive plan for small park, required field trip.

STEPHEN F. AUSTIN STATE UNIVERSITY (continued)

Second Course

Title: Natural History Interpretation
Hours: 2 semester
Texts: none

Course Description:
Seven days of study at forestry field station in vertebrate and plant field collection techniques, description, and interpretation. Approximately 30 students (50% sophomores, 50% juniors) enroll in this course each summer.

Course Requirements:
Trapping report and island diversity report, journal, camper/fisherman survey, recreation impact report, final exam, field performance evaluation.

Third Course

Title: Field Techniques in Outdoor Environmental Education
Hours: 3 semester
Texts: Swan; Ricklefs.

Course Description:
Course is designed development of skills in the use of existing natural history and environmental education programs. Emphasis is placed on participation in, and obtaining a set of, experimental learning activities. Approximately 20 students (25% sophomores, 25% juniors, and 50% seniors) enroll in this course each semester.

Fourth Course

Title: Advanced Techniques in Outdoor Environmental Education
Hours: 3 semester
Texts: none.

Course Description:
Students learn advanced principles of preparing and administering interpretive centers, nature centers, and outdoor classrooms. Approximately 6-8 graduate students enroll in this course each semester.

Course Requirements:
Term paper, operational analysis of existing nature center.

TEXAS A&M UNIVERSITY

James Grahamm
Dept. of Recreation and Parks
Texas A&M University
College Station, TX 77843
(409) 845-4920

Interpretive Curriculum

In pursuing a Bachelor of Science degree in Recreation and Parks, a student may select the Interpretation option, one of two offered within the department. The first two years are designed to give students a solid, broad foundation in the history and theory of recreation and parks, ecological concepts, park management, environmental interpretation, and in outdoor and community recreation. During the final two years, an interpretive student's curriculum will be composed of:

Methods of Environmental Interpretation	3 semester hours
Interpretation and Management of Historical Sites	3 semester hours
Photo-Journalism	6 semester hours
Public Speaking and Technical Writing	6 semester hours
Park Planning and Design	4 semester hours
Management of Urban Parks and Recreation Administration	6 semester hours
Conservation of Natural Resources	3 semester hours
Recreation Research and Analysis	3 semester hours
1 elective of each: Management, Ecology, Anthropology, Planning, Analysis, and Physical Science	18 semester hours
General Electives	15 semester hours
Supervised Field Studies	3 semester hours
Seminar	1 semester hour

A master or doctoral student may pursue degrees in Recreation and Resource Development. Both programs are flexible and tailored to individual needs. Interpretation may be the field of emphasis if so chosen. Texas A&M University is on the semester system.

Interpretive Facilities

Available departmental interpretive facilities include: full-time audio-visual technician; recording studio; projection studio; exhibit lab; auto-tutorial lab with slide projection carrels, equipment storage and checkout (including 35mm and video cameras, slide, filmstrip, movie and overhead projectors, recording equipment, time-lapse cameras, etc.); display cases; etc. University facilities include: campus arboretum, several exhibit areas, campground, and Instructional Media Center. Nearby interpretive facilities include: many city parks, the Brazos Valley Museum, and several state and federal parks.

TEXAS A&M UNIVERSITY (continued)

Interpretive Courses

First Course (required)

Title: Methods of Environmental Interpretation
Hours: 3 semester
Texts: Hanna; Lewis; Sharpe; Tilden (recommended).

Course Description:
Discussion of the principles and techniques employed to communicate values, natural history, and cultural history to visitors. The gathering, analysis, and presentation of information and the planning, construction, and use of interpretive techniques are taught through lecture, guest speakers, weekly hands-on labs, and a two-day field trip. Participation in professional conferences and workshops is encouraged, but not required. Approximately 40 students (20% sophomores, 25% juniors, 25% seniors, and 5% graduate students) majoring in Parks and Recreation (70%), Wildlife (15%), Education, Biology, and other disciplines (5% each) enroll in this course each semester.

Course Requirements:
Course grade is determined by success on midterm and final exams, participation in a two-day field trip, and successful completion of a wide variety of hands-on projects, including: exhibit construction, two slide shows, story-board cards, interpretive brochure, guided field activities, tours, "spontaneous interpretation", interpretive writing, discovery boxes, and special interpretive events involving the local community, and others.

Second Course

Title: Interpretation and Management of Historic Sites
Hours: 3 semester
Texts: Alderson and Low; assigned readings; optional readings including Sharpe, Hanna, and Tilden.

Course Description:
A study of the philosophy, history, legal foundations, and current interpretive management practices of areas administered for their cultural and historical significance in Texas and the United States. Lecture and hands-on experience in exhibit planning and construction, and historical demonstrations will be included. About 10-15 students majoring in Recreation and Parks, History, Education, and Wildlife participate in this course which is offered 1 semester each year.

Course Requirements:
Mid-term and final examinations; historical research project; field trips; exhibit plans and construction; class participation are all required and evaluated during the course.

TEXAS A&M UNIVERSITY (continued)

Third Course (elective)

Title: Traveling Field Course in Advanced Interpretive Studies
Hours: 3 semester
Texts: none

Course Description:
An extended, two-week intersession field course designed to give students first-hand exposure to current interpretive practices and practitioners in the Southwest through travel, on-site behind-the-scenes observations, and in-depth discussions with interpretive professionals. Approximately 10-15 students enroll in this course, offered once a year, or as needed. Students are juniors (25%), seniors (60%), and graduate students (15%) majoring in Parks and Recreation (70%), and Education, Wildlife, or other disciplines (10% each).

Course Requirements:
Prior to the trip, students are required to research one site each before and present a review of their research to the other students upon arrival at that site. In addition to the two-week trip, students are required to prepare a detailed field notebook containing materials collected and a description, analysis, and evaluation of each site visited. Also, student groups have their choice of developing a professional-quality slide show or articles describing and analyzing the interpretive services observed on the trip.

Fourth Course (graduate level)

Title: Recreational Resource Communications
Hours: 3 semester
Texts: assigned readings

Course Description:
This is a graduate level course in the philosophy, concepts, and techniques associated with communications pertaining to use of natural resources for recreation. Approximately 10-15 students (10% seniors, 90% graduate students) and other majors (10%) enroll in this course each semester.

Course Requirements:
Lecture/seminar format requiring extensive reading and class presentations and discussion, an interpretation research project, midterm and final exams.

TEXAS A&M UNIVERSITY (continued)

Additional Support Courses in other Departments

Title: Nature Centers for Learning
Hours: 3 semester

Course Description:
Role of nature centers and the extent to which they serve educational programs in natural resoruce conservation. Detailed study of the history, operations, methods, and programs of nature centers. A field trip is required.

Title: Museums and Their Functions
Hours: 3 semester

Course Description:
Role of museums, especially those specializing in natural history and the extent to which they serve the community, state, nation, and the advancement of the sciences included in their programs. History, operations, methods, and programs are discussed. A field trip is required.

NOTE: Many other support courses are available from the wide variety of departments at Texas A&M.

Proposed New Facility

The Texas Forest Service has made available to the Recreation and Parks Department a 29-acre wooded plot (mixed hardwood and conifer) 60 miles east of campus. A major proposed use of this land is to establish it as a conservation education site. For training and field experience in environmental planning, graduate and undergraduate students would use the area for working with school, museum, recreation, and other youth groups in environmental education and interpretation activities.

UNIVERSITY OF UTAH

T. Ellis
Dept of HPER N-226
The University of Utah
Salt Lake City, UT 84112
(801) 581-8085

Interpretive Curriculum

The B.S., M.S., and Ph.D. degrees are offered at the University of Utah, which is on the quarter system. The course described below supplements the Outdoor Program - a major in environmental interpretation is not offered here.

Interpretive Course

Title: Environmental Interpretation
Hours: 3 quarter
Texts: Sharpe.

Course Description:
Approximately 12 students (50% juniors, 50% seniors) majoring in Parks and Recreation enroll in this course, which is offered once each year.

UNIVERSITY OF VERMONT

Thomas R. Hudspeth
UVM Environmental Program
153 S. Prospect
The University of Vermont
Burlington, VT 05405
(802) 656-4055

Interpretive Curriculum

The B.A. or B.S. in Environmental Studies and the B.S. in Recreation Management are available at the University of Vermont, which is on the semester system. Students may design a major in Environmental Interpretation through the major in Environmental Studies. Since the Environmental Program is a university-wide program with its curricula approved in all undergraduate colleges and schools, therefore students may enroll in the college or school of their choice; most choose the School of Natural Resources or the College of Arts and Sciences when specializing in environmental interpretation.

The required courses for the Environmental Interpretation major include: Introduction to Environmental Studies, Major Seminar, Environmental Theory, Research Methods, Senior Project, Senior Seminar, and at least 24 hours of advanced courses related to the student's emphasis in environmental interpretation (and selected in close consultation with an advisor). These advanced courses normally include some skills courses in environmental interpretation, communications and group dynamics, photography, design, AV methods, cartography, and some content courses in natural history (geology, botany, zoology, meteorology, climatology, astronomy, forestry, wildlife biology) and/or cultural history (anthropology, geography, history).

While students in the University of Vermont Recreation Management major in the School of Natural Resources may not specialize in environmental interpretation, they are required to take a course on the topic during their senior year.

Interpretive Facilities

On campus: lab space in design lab and cartography lab, geology and zoology museums, herbarium, greenhouses, horticulture center, dairy farm, and ten natural areas owned and managed by UVM. Nearby: several state parks with interpretive programs; Discovery Museum in Essex Junction; Green Mountain Audubon Nature Center in Huntington; Shelburne Farms Resources in Shelburne, and others.

UNIVERSITY OF VERMONT (continued)

Interpretive Course

Title: Environmental Interpretation
Hours: 3 semester
Texts: Hudspeth; Lewis; Sharpe; Tilden.

Course Description:

Discussion and development of principles, philosophy, techniques and skills of Environmental Interpretation (defined as communicating environmental values, natural history processes, and cultural features) for use in developing, planning, managing, and evaluating interpretive programs. Approximately 30 students (20% juniors, 75% seniors, 5% graduate students) majoring in Parks and Recreation (50%), Environmental Studies (30%), Wildlife (10%), and Forestry (10%) enroll in this course each semester.

Course Requirements:

Class participation, exam, and the following assignments: critiques of interpretive materials, three-minute talks, mystery corner or "stumper," story, interpretive master plan, self-guiding trail, slide program or exhibit.

OLD DOMINION UNIVERSITY

Charles M. Smith
c/o Learning Resources
School of Education
Old Dominion University
Norfolk, VA 23508
(804) 440-3250

Interpretive Curriculum

The B.S. and M.Ed. are offered at Old Dominion University, which is on the semster system. An interpretive curriculum is currently under development at this university.

Interpretive Facilities

Numerous intepretive facilities are available in the area, including: Dismal Swamp Wildlife Refuge, Back Bay Wildlife Refuge, Sea Shore State Park, Newport News City Park, N/W River Park, and Macky Island Refuge.

Interpretive Course

Title: Wilderness Interpretation and Conservation
Hours: 3 semester
Texts: Sharpe; numerous state and federal publications.

Course Description:
Students identify and examine natural resources and various ecological environments, and consider of climate and geography on natural and wildlife cycles and the impact of human and other hazards on conservation. Approximately 40 junior and seniors majoring in Parks and Recreation enroll in this course each semester.

Course Requirements:
Identification of resources illustrated in films, slides, models, etc.

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Joseph W. Roggenbuck
Dept. of Forestry
Virginia Polytechnic and State University
Blacksburg, VA 24061
(703) 961-7418

Interpretive Curriculum

The B.S., M.S., and Ph.D. in Forestry are offered at Virginia Polytechnic and State University (VPI&SU), which is on the quarter system. Students in the department are primarily foresters: some specialize in forest recreation, but they are still professional foresters. The forest recreation students take the one course offered in interpretation. Our strength is in research at the graduate level. This department has a strong graduate program for students interested in research on the value of interpretation for managers, or on evaluation of the effectiveness of interpretive programs.

Interpretive Facilities

Little interpretive lab space at the University. Excellent interpretive research and field opportunities with the nearby NPS Blue Ridge Parkway, Booker T. Washington National Monument, Jefferson National Forest, and U.S. Army Corps of Engineers water projects.

Interpretive Course

Title: Interpretive Methods
Hours: 3 quarter
Texts: Sharpe; Tilden.

Course Description:
This course addresses three major questions: "What is environmental interpretation?"; "How does one become an effective environmental interpreter?"; and, "How can the effectiveness of interpretation be measured?". A lecture/lab/discussion format is used. The instructor presents examples of interpretive techniques that have been, or are being, or might be used in various natural or cultural resource situations. Students are assigned two interpretive tasks and present these to the class. Approximately 25 students (sophomores and seniors) majoring in Forestry (60%) and Parks and Recreation (40%) enroll in this course, which is taught one quarter each year. The instructor is in the process of changing this course from a senior level to a sophomore level course.

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY (continued)

Course Requirements:
Students develop an interpretive master plan and a slide program and present these orally to the class.

UNIVERSITY OF WASHINGTON

Grant W. Sharpe
College of Forest Resources
AR-10
University of Washington
Seattle, WA 98195
(206) 545-0884

Interpretive Curriculum

The B.S., M.S., and Ph.D. degrees are offered at the University of Washington, which is on the quarter system. Requirements for completion of a B.S. degree for students specializing in Interpretation are as follows:

Two years of basic university preparation, including:

Forest Resources	11 credits
Mathematics	13 credits
Physical Sciences	10 credits
Earth Sciences	10 credits
Social Sciences	10 credits
Humanities/Communications	10 credits
Biology	10 credits
Engineering	10 credits

Upper Division:

Field Trip	3 credits
Introduction to Outdoor Education	5 credits
Forest Ecology	5 credits
Interpreting the Environment	5 credits
Park Management	3 credits
Park Planning	3 credits
Law Enforcement	2 credits
Wildlife Conservation	4 credits
Silviculture	3 credits
Public Relations	5 credits

For Interpretive Students:

Advanced Interpretation	5 credits
Still Photography	3 credits
North American Indians	5 credits
Natural History of Birds	5 credits
Natural History of Mammals	5 credits
Entomology	3 credits
Marine Invertebrates	5 credits
Freshwater Invertebrates	5 credits
Electives	34 credits
Total	180 credits

UNIVERSITY OF WASHINGTON (continued)

Interpretive Facilities

Students sign up for special credit courses for work performed at two parks in the Seattle area. Work includes: leading conducted walks, exhibit preparation, brochure writing, and preparing slide presentations. Departmental laboratory facilities include an interpretive lab, self-teaching lab, dark room, multi-media lab, and sound booth.

Interpretive Course

First Course

Title: Interpreting the Environment
Hours: 5 quarter
Text: Sharpe.

Course Description:
This course examines the role of the interpretive specialist in heritage and natural resource areas, with emphasis on increasing visitor enjoyment, encouraging thoughtful use to reduce human impact, and promoting understanding of agency programs. Also considered are: interpretive media selection, personal and non-personal services, supporting activities, and professional development. Prerequisite: permission of the instructor. Approximately 25 students (40% juniors, 40% seniors, 20% graduate students) majoring in Outdoor Recreation (80%), Forestry (10%), and other disciplines (10%), enroll in this course, which is offered each winter quarter. This course is also available through Independent Study (correspondence).

Course Requirements:
Labs: television presentations on objects of cultural or natural history, label writing exercise, nature walk presentation, trail brochure writing exercise, slide presentation, exhibit design exercise, visitor center floor plan layout project and presentation.

Second Course

Title: Advanced Environmental Interpretation
Hours: 5 quarter

Course Description:
The course addresses interpretive management and planning. Independent study projects in selected park and recreation areas provide practical experience in interpretive inventory, planning, and programming. Prerequsite: course listed above, "Interpreting the Environment."

WASHINGTON STATE UNIVERSITY

Paul Richard Saunders
Dept. of Forestry and Range Management
Washington State University
Pullman, WA 99164-6410
(509) 335-2235

Interpretive Curriculum

The B.S. and M.S. degrees in Wildland Recreation Management are offered at Washington State University, which is on the semester system. Students are required to take a series of core courses, and then may select a management or interpretation option. Core requirements in the Wildland Recreation curriculum are as follows:

Forestry/Range Management	23 hours
Physical Sciences	12 hours
Biological Sciences	12 hours
Social/Political Science	9 hours
Mathematics/Computer Science	8-11 hours
Communications	9 hours
Conservation	3 hours
Economics	3 hours
Environmental Science	3 hours
Health Education	2 hours
Total core course requirement	84-87 hours

Within the interpretation option, students are required to take: Social Psychology; Introduction to Acting; Fire, Range, or Wildlife; Ornithology; and Zoology. Electives are selected from Sociology/ Psychology, Anthropology, Speech, and Humanities.

Interpretive Facilities

Media lab with complete range of audio and video equipment and TV video backpack unit; museums on campus; (about a dozen) county, state, and federal museums and visitor centers within one hour drive; NPS area; Corps area; state and county parks; NPS training programs.

Interpretive Course

Title: Interpretive Techniques
Hours: 3 semester
Texts: Lewis; Tilden; about 50 assigned readings.

WASHINGTON STATE UNIVERSITY (continued)

Course Description:

An introduction to the field of interpretation with emphasis on its application to the wildland recreation setting. The course exposes the student to theoretical principles and practical techniques of interpretation. The student is expected to draw upon his knowledge, experience, and background to complete a variety of assignments. The course provides hands-on experience with a variety of media used in interpretive settings. Course objectives are to: develop an understanding of the theoretical and practical concepts of interpretation; gain an appreciation for the role of interpretation in recreation management; provide exposure to equipment and media used in developing an interpretive program; and provide the background to objectively critique various interpretive programs used by agencies. Approximately 15 students (45% juniors, 45% seniors, 10% graduate students) majoring in Wildland Recreation (90%), and Parks and Recreation (10%) enroll in this course each semester.

Course Requirements:

On the basis of students' interpretive inventory and favored themes in their interpretive plan, the following assignments are required: interpretive talk; illustrated interpretive program; interpretive brochure; interpretive exhibit and visitor center design; news release; self-guided nature or history trail; and interpretive inventory, themes, and plan.

WESTERN WASHINGTON UNIVERSITY

Jim Moore
Dept. of Recreation and Parks
Bond Hall 301
Western Washington University
Bellingham, WA 98225

Interpetive Curriculum

The B.A. degree in Recreation and Parks is offered at Western Washington University, which is on the quarter system. This institution does not have an emphasis in interpretation, but one course in interpretation is offered, and courses in other departments supplement this course. A support area of 25 credits is required of each student, which vary with student interests. Typical courses include: Introduction to Environmental Education, Outdoor Education, Experiential Learning in Environmental Education, Writing of American Naturalists and Outdoorsmen, Outdoor Education Curriculum, Environmental Interpretation, Field Biology of the Northwest, Natural History of the Northwest, and others. Students are encouraged to take additional courses in Geography, Geology, History, Anthropology, etc., as they apply to their career goals.

Interpretive Facilities

Minimal lab space and equipment. Many resources (museums, centers, etc.) within a two-hour drive in both Vancouver, B.C. and Seattle, Washington.

Interpretive Course

Title: Interpretation in Recreation Settings
Hours: 3 quarter
Texts: Lewis; Sharpe.

Course Description:
This course addresses the philosophy, organization, content, and process of interpretation in human and natural environments, with equal emphasis placed on classroom instruction and field technique. Approximately 40-45 students (all juniors) majoring in parks and recreation enroll in this course each quarter.

Course Requirements:
Contract grading system, offering a wide choice of assignments to achieve the student's desired objectives. Assignment choices include: slide-tape or video presentation, photo-essay presentation, interpretive pamphlet, interpretive plan, interpretive stop, research an interpretive topic, or visit an interpretive site and report.

MARSHALL UNIVERSITY

Raymond Busbee
Park Resources and Leisure Services
Marshall University
Huntington, WV 25701
(304) 696-6477

Interpretive Curriculum

The B.S. in Parks and Recreation is offered at Marshall University, which is on the semester system. A specialization is offered in Parks and Conservation, but not in interpretation. Required courses in this major are: Park Management and Operations, Wild-land Recreation Management, Environmental Interpretation, Forest Recreation Planning, General Field Ecology, Plant Taxonomy, Conservation of Natural Resources, Methods and Techniques of Regional Planning, Map Intelligence and Projections, Scientific and Technical Writing, Introduction to Parks and Leisure Services, Outdoor Recreation, Administration of Parks and Recreation, Park and Recreation Internship, Business and Professional Speech, Production of Audio Visual Aids, and First Aid. Recommended courses include: Recreation Areas & Facilities Planning, Recreation Areas and Facilities Maintenance, Economic Botany, Limnology, Conservation of Forests, Soils, Wildlife, Urban & Rural Land Use, Applied Cartography, Water Resources, Environmental Geology, Introduction to Statistics, Invertebrate Zoology, and Vertebrate Zoology.

Interpretive Facilities

Park facilities - Huntington Park Board.

Interpretive Course

Title: Environmental Interpretation
Hours: 3 semester
Texts: Sharpe; Tilden.

Course Description:
The course deals with: the basic philosophy and principles of interpretation as it is practiced today, the techniques of trail planning and construction, and the techniques of interpretation. Approximately 20 students (seniors in Parks and Recreation) take this class each semester.

Course Requirements:
Interpretive writing assignment, oral interpretive presentation, trail planning and construction project.

WEST VIRGINIA UNIVERSITY

William F. Wylie
329 Percival Hall
West Virginia University
Morgantown, WV 26506
(304) 293-3721

Interpretive Curriculum

The B.S. and M.S. degrees in Recreation and Parks are offered at West Virginia University (WVU), which is on the semester system. Required courses for the B.S. degree include: English, Biology, Math, Statistics, Economics, Psychology, Sociology, Leisure in America, Introduction to Recreation and Parks, Outdoor Recreation, Environmental Concerns, Philosophy of Recreation, Program Planning, Facilities Planning, Fundamentals of Interpretation, Historical Interpretation, Internship, Resource Conservation, Critical Reasoning, Introduction to Forestry, Foreign Policy, and Forest Economics. Recommended courses include: Introduction to Geology, Dendrology, Physical Geography, Sociology, Technological and Social Change, Wildlife Management, and State and Local Government.

Interpretive Facilities

Workshop and labs in the division of Forestry, housing AV equipment (including VCR and camera) and a learning center (slides, tapes, etc.). Core Aboretum on campus; WVU farms, woodlots, and forest within 10 miles; and Terra Alta Biology Station (50 miles). There are no museum or school programs.

Interpretive Course

Title: Fundamentals of Nature Interpretation
Hours: 3 semester
Texts: Sharpe; Tilden.

Course Description:
This course addresses methods and techniques of interpreting the natural environment to individuals and groups. Approximately 15-20 students (75% seniors, 25% graduate students) majoring in Parks and Recreation (80%), Wildlife (10%), Education (5%), and Forestry (5%) enroll in this course, which is taught every spring semester.

UNIVERSITY OF WISCONSIN - MADISON

James Gramann
Dept. of Forestry
116 Agriculture Hall
1450 Linden Drive
University of Wisconsin - Madison
Madison, WI 53706

Interpretive Curriculum

An option in Resource Interpretation is offered in the Department of Forestry at the University of Wisconsin at Madison. The Natural Resources Curriculum for the Bachelor's degree is outlined below:

College and University Requirements	33 hours
Earth Resources	4 hours
Plant-Animal Ecology	4 hours
Man-Resource Relationships	5 hours
Social Science and Humanities	15 hours
Requirements of the Major	86 hours
Electives	15 hours
Resource-related courses	25 hours
Minimum Total	128 hours

UNIVERSITY OF WISCONSIN - RIVER FALLS

Paul A. Klemm
Dept. of Plant and Earth Science
University of Wisconsin - River Falls
River Falls, WI 54022
(715) 425-3729

Interpretive Curriculum

The B.S. degree in Scientific Land Management is offered at the University of Wisconsin - River Falls, with emphasis areas available in Land Use Planning, Park Management, Recreation, or Conservation. This university is on the quarter system. This department also encourages students to enroll in a Cooperative Internship. The basic requirements for the B.S. degree are outlined below:

Basic Studies	52 hours
Academic Specilization	84 hours
Additional Departmental & Vocational Requirements	53 hours
Total	192 hours

Interpretive Facilities

Sites: labs, two university farms, 3 state parks (within 15 miles), county park, county forest, Fort Snelling Historical Park, Spring Valley Cave. Equipment: all AV materials including video tapes and portable TV camera.

Interpretive Course

Title: Interpretive Services
Hours: 3 quarter
Texts: Sharpe.

Course Description:
Analysis of the philosophy and function of interpretive programs in natural or historic settings. Included are special examinations of environmental attitudes, skills in writing and speaking, audience appraisal, and program evaluation; and field experiences demonstrating how to lead an interpretive program. Approximately 25 students (sophomores and juniors) enroll in this course each term, most from various majors in the College of Agriculture.

Course Requirements:
Three exams, bulletin board project, exhibit project, nature walks, self-guided trail project. Prerequsites: Introduction to Resource Management, Introduction to Biology, Botany or Zoology, Basic Photography.

UNIVERSITY OF WISCONSIN - STEPHENS POINT

Michael P. Gross
College of Natural Resources
University of Wisconsin
Stephens Point, WI 54481
(715) 346-2076

Interpretive Curriculum

The B.S. and M.S. degrees in Resource Management are offered at the University of Wisconsin at Stevens Point (UWSP), with a 25 credit minor in Interpretation. This university is on the semester system. Courses in the minor provide the student with practical, skill developing experiences in environmental education at the University's Central Wisconsin Environmental Station. This emphasis on experience in conjunction with lectures and discussions well prepares the student for the dual role required of today's naturalist. Core courses are: Environmental Interpretation I and II, Foundations of Environmental Education, Environmental Education and Interpretation Practicum, and Community Environmental Issues Investigation.

Interpretive Facilities

UWSP Museum of Natural History, Schmeckle Reserve (200-acre study area of the College of Natural Resources), Central Wisconsin Environmental Station (Resident Environmental Center operated by the college).

Interpretive Courses

First Course

Title: Environmental Interpretation I
Hours: 3 semester
Texts: Sharpe; Tilden.

Course Description:
This course addresses principles and verbal techniques to relate the values of natural history and cultural features to visitors at parks, recreation areas, museums, and other institutions; walks, talks, and programming. Approximately 50 students (50% juniors, 45% seniors, 5% graduate students) majoring in Forestry (30%), Wildlife (20%), Conservation (15%), Water (15%), Soils (10%), Paper Science (5%), and Parks and Recreation (5%) enroll in this course each semester.

Course Requirements:
Five minute talks, illustrated talks, interpretive walks, two quizzes, evaluations, and attendance (graduate students will have an additional assignment to develop a museum tour for children and lead it twice with local school groups or to develop a talk for residents of Portage County retirement homes and present it twice).

UNIVERSITY OF WISCONSIN - STEVENS POINT (continued)

Second Course

Title: Environmental Interpretation II
Hours: 3 semester
Texts: Sharpe; Tilden.

Course Description:
This course addresses: nonverbal techniques used to relate the values of natural history and cultural features at parks, recreation sites, museums, and other institutions; the techniques of writing, signs, trails, exhibits, slide-tape programs, and interpretive planning. Field trips to area interpretation centers are included. Prerequisite: Environmental Interpretation I. Approximately 25 students enroll in this course each semester.

Course Requirements:
Two essays, two quizzes, two reports, attendence and participation, and an interpretive project. Graduate students are required to complete an additional assignment.

UNIVERSITY OF WYOMING

Cynthia Nielsen
Recreation and Park Administration
The University of Wyoming
Laramie, WY 82071
(307) 766-4185

Interpretive Curriculum

The B.S. and M.S. degrees in Recreation and Park Administration are offered at the University of Wyoming, which is on the semester system. The credit hour requirement for the Bachelor of Science degree in the Department of Recreation and Park Administration is 128 semester hours credit plus 2 semesters of Physical Education Activity courses. Required courses are:

- General requirements.....54 hours
- Major and professional option.....46 hours
- Areas of concentration (only one area required)
  - Natural Sciences.....24 hours
  - Psych./Socio./Soc. Work.....24 hours
  - History/Anthropology.....24 hours
  - Planning.....24 hours
  - Electives.....5 hours

Recommended courses include:

- Environmental Education for Teachers.....3 hours
- Natural Science Activity Courses:
  - Care of Living Things.....1 hour
  - Natural History and Children's Science.....1 hour
  - Energy and Resource Materials.....1 hour

Interpretive Facilities

AV equipment: projectors, screens, lapse dissolve, light table, slide file. Museums/Nature Centers: planetarium, geology museum, Laramie Plains Museum (historical). Lab space: share drafting and cartography labs, display space (small room with 9 lighted enclosed cases for museum fabrication projects).

Interpretive Course

Title: Interpreting the Environment
Hours: 3 semester
Texts: Sharpe; Tilden.

UNIVERSITY OF WYOMING (continued)

Course Description:

This course emphasizes the purposes, methods, techniques and settings of environmental interpretation - with focus on public speaking, conducted trips, illustrated slide programs, photography, audio-visuals, exhibit design, and visitor information services. The course prepares students to interpret natural and cultural heritage for the enjoyment and education of visitors and recreationists. Evening lab sessions are scheduled periodically throughout the semester to provide practical application of lecture topics and for the convenience of guest speakers. Approximately 30 students (sophomores and juniors) majoring in Parks and Recreation (85%), Wildlife (10%), and Education (5%) enroll in this course each semester.

Course Requirements:

Grades are assigned on the basis of performance on a midterm, a comprehensive final examination, a museum exhibit design project, and an oral research presentation. Research and written work may also be included.

CANADIAN SCHOOLS

LAKELAND COLLEGE

Stuart Heard
Dept. of Environmental Sciences
Lakeland College
Vermillion, Alberta TOB 4MO
CANADA
(403) 853-2971

Interpretive Curriculum

This program trains students in the diverse abilities and education necessary to manage and interpret Canada's historic and natural heritage areas. Areas of study include interpretation, park operations, law enforcement, first aid, photography/audio-visual techniques, communications, environmental education, natural sciences, and other science options. Lakeland College has five courses directly related to interpretation as a part of the Parks and Recreation Technology program. The first three courses described below are compulsory: Interpretation III and Environmental Education are optional for majors in this program.

Interpretive Courses

First Course

Title: Communication and Interpretation I
Hours: 2 lecture, 3 lab - semester system
Text: Tilden.

Course Description:
An introductory course addressing the definition, philosophy, and techniques of interpretation and communications methods necessary to present public education activities. Topics of study include interpretation theory, program structure and organization, methods of communication, creativity, program edit and technique, use of themes and concepts, and effective public relations techniques.

Course Requirements:
Readings, lab projects, student presentations, communication assignments (written, speaking, and visual), and class assignments.

Second Course

Title: Interpretation II
Hours: 2 lecture/3 lab
Text: Sharpe.

LAKELAND COLLEGE (continued)

Course Description:
This course is an extension of Communication and Interpretation I emphasizing the techniques of program delivery and an intensive "hands-on" approach to activities in this field. Major projects include planning and delivering conducted walks or tours, roving/point duty, developing self-guided forms.

Course Requirements:
Readings; student presentations (one conducted walk or auto tour, one evening program, one exhibit, one self-guided trail signage); lab and class assignments; final exam.

Third Course

Title: Photography/Audio-Visual Techniques
Hours: 1 lecture / 3 lab
Texts: assigned readings.

Course Description:
This course offers training in the use of photographic and audio-visual techniques, including: darkroom work, preparation of audio visual materials such as overheads, video-tapes, slide-tape shows, and the operation of a variety of equipment.

Course Requirements:
Assigned readings; students undertake a major project to produce an audiovisual program of their own, including photography, sound mixing, recording, scriptwriting, and slide-tape programming; class assignments, midterm and final exam.

Fourth Course

Title: Environmental Education
Hours: 1 lecture / 4 lab
Texts: Cornell; Cox and Stapp; assigned readings.

Course Description:
An introductory course in the field of Environmental Education dealing primarily with methods used in working with groups of children in the outdoors. Working with teachers or leaders active in Environmental Education programs, developing specialized projects, learning age group characteristics, and understanding group dynamics are part of this course. At the end of this course, students will be able to: define Environmental Education; describe the components of an E.E. program and how to implement a program in a park or school setting; design an E.E. program or project

LAKELAND COLLEGE (continued)

for a group and demonstrate its effectiveness in practicum; use a variety of E.E. activities in either outdoor or classroom setting; explain basic child development and age group characteristics; and, explain and demonstrate effective outdoor teaching methods for children.

Course Requirements:
Communication and Park Interpretation I (described above) is a prerequisite for this course. Course grades are based on a mid-term and final exam, a practicum experience, and class assignments. In the practicum, students are assigned to a specific group of children (in conjunction with a teacher or leader) as a teacher aide, field trip leader, or project developer for the semester. Students will negotiate with the course instructor and teacher/leader the Environmental Education program or activities to be undertaken. Class assignments will be brief, practical exercises.

Fifth Course

Title: Park Interpretation III
Hours: 2 lecture / 3 lab
Texts: Alberta Recreation and Parks; Sharpe.

Course Description:
Utilizing a systematic planning approach, students develop an interpretive plan and operational program for a site. Areas of concentration include: fundamental planning principles, survey of interpretation planning methods and interpretive programs, program operational considerations such as budget, levels of service, marketing, standards, and interpretive modes.

Course Requirements:
Readings; interpretation concept plan (team project of development of a complete interpretive plan for a site); interpretation program plan (team project developing an operational plan for the chosen site); lab projects; exams.

UNIVERSITY OF ALBERTA

R. Peter Heron
Department of Rec. Administration
University of Alberta
Edmonton, Alberta
CANADA T6G 2H9
(403) 432-3611

John Lunn
Dept. of Rec. Administration
University of Alberta
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James R. Butler
Department of Forest Science
University of Alberta
Edmonton, Alberta
CANADA T6G 2H9
(403) 432-2819

Interpretive Curriculum

A student at the University of Alberta has the option of majoring in the Department of Recreation Administration (Faculty of Physical Education and Recreation) or the Department of Forest Science (Faculty of Agriculture and Forestry) to obtain a background in Heritage Interpretation. The B.A. and M.A. degrees are available in Recreation Administration; the B.Sc., M.Sc., and Ph.D. degrees are available in Forest Science.

The pattern in the Department of Recreation Administration focuses on the principles and methods of interpretation and their application to the development and operation of interpretive programs and facilities. Specific interpretive courses examine the objectives of interpretation in assisting the visitor to develop a greater appreciation and understanding of the environment and in assisting various agencies in the achievement of their management goals. Appropriate selection of optional courses provides the opportunity for students to further their interests in the planning and preparation of interpretive media and programs for application to a variety of interpretive settings.

The pattern consists of: 3 Pattern Recreation Courses (Program Planning and Implementation, Principles of Heritage Interpretation, and Methods of Heritage Interpretation); 9 Pattern Foundation Courses (offering a variety of options); and 8 Optional Courses (selected from Humanities and Social Sciences, Communications, Natural Sciences, Management, Recreation, and Physical Education).

The University of Alberta is on the semester system.

Interpretive Facilities

Facilities include: Interpretation Lab and Study Space; full range of audio-visual equipment and heritage interpretation media; nearby provincial museum, outdoor museum, city nature center, urban river valley park, national park, nature sanctuaries, etc.

UNIVERSITY OF ALBERTA (continued)

Interpretive Courses

First Course

Title: Principles of Heritage Interpretation
Hours: 3 semester
Texts: Alderson and Low; Sharpe; Tilden; others on reserve.
Instructor: Heron

Course Description:
Examination of heritage interpretation as a part of cultural and environmental recreation programs, and interpretive issues. This course provides an introduction and comprehensive overview of the principles of interpretation and their application to interpretive programs and facilities. It is intended that this course complement Methods of Heritage Interpretation by providing the necessary background to the more detailed analysis of interpretive methods and techniques covered in the latter course. Approximately 15 students (seniors and graduate studetns) majoring in Parks and Recreation (50%), Forestry (20%), Education (10%), Arts (10%), and Science (10%) enroll in this course each semester. This course is offered jointly by the Department of Recreation Administation and the Department of Forestry.

Course Requirements:
A major paper of at least 3000 words on an aspect of a topic discussed in class, a mid-term and final exam.

Second Course

Title: Plans for Heritage Interpretation
Hours: 5 semester
Texts: Alderidge; Sharpe; Tilden.
Instructor: Heron

Course Description:
This course explores the principles and practices of planning interpretive programs at the regional, management unit, and site levels, considering both historical/cultural and natural environments. It will examine regional master plans, management unit plans, site/module plans, facilities plans, and program plans through lecture, discussions, and field trips. Approximately 15 students (70% seniors, 30% graduate students) majoring in Parks and Recreation (50%), Forestry (20%), Education (10%), Arts (10%), and Science (10%) enroll in this course each semester.

UNIVERSITY OF ALBERTA (continued)

Course Requirements:
Short paper comparing Bradley's (Sharpe, Ch.5) approach to interpretation with that of Alderidge; a field diary containing organized observations and comments on planning perspectives and techniques; and a final examination.

Third Course

Title: The Principles and Practices of Museum Exhibition
Hours: Thursday evenings 6:30-9:30 pm
Texts: Burcaw; Neal.
Instructor: Lunn (Director, Provincial Museum of Alberta)

Course Description:
The objective of this course is to review the principles and practices of 'Permanent', Temporary, and Travelling Exhibitions in the context of the contemporary museum and art gallery. Precise details of this course are made once the numbers of students taking this course are known. Practicums are held at the Provincial Museum of Alberta. Experts in various fields of museum exhibition will be assisting the instructor throughout the course. Approximately 20 students (seniors and graduate students) majoring in Parks and Recreation (40%), Forestry (20%), Home Ec. (15%), Library Science (15%), and Education (10%) enroll in this course each semester. (This is a special seminar not offered on a regular basis.)

Course Requirements:
Students are required to write an introductory topic paper and one major seminar paper, make a major oral presentation of approximately 20-45 minutes, and lead a subsequent discussion for approximately half an hour.

Fourth Course

Title: Methods of Heritage Interpretation
Hours: 3 hours/week
Texts: Sharpe; supplementary readings.
Instructor: Butler, Dept. of Forest Science

Course Description:
This is an overview course dealing with the application of current methodologies in the interpretation of natural and historical resources.

Course Requirements:
Lab assignments, term paper research assignment, final examination, and class participation.

UNIVERSITY OF ALBERTA (continued)

Fifth Course

Title: Heritage Interpretation Field Trip
Hours: 16 day field trip in Spring Session
Texts: none
Instructor: Butler, Dept. of Forest Science

Course Description:

Extended field trip to comparatively examine the philosophies, approaches, and applied methodologies of a diverse range of institutions and agencies providing heritage interpretation programs. This course is intended to supplement the class materials presented in Principles of Heritage Interpretation, Methods of Heritage Interpretation, Recreational Use of Wildlands, and Wildland Recreation Management by observing first-hand a diverse range of recreational interpretive facilities and program methods during a 16-day field trip in Alberta, British Columbia, and Montana. Emphasis is placed upon comparative approaches to problems of programming, design, and management presently facing the recreation-interpretive profession. More than thirty-five specific sites or areas are visited representing interpretive or educational approaches by eight federal agencies and a variety of provincial, state, and private agencies, with emphasis placed upon critical evaluation of each. Each student accepts a specific study assignment and collects data or observations during the trip for a final presentation or paper.

A very special event of the trip includes an evening over campfire at the junction of the Gibbon and Firehole Rivers where members of the Washburn expedition were encamped in Yellowstone September 19, 1870, and where arose that night - "the National Park idea". The events and personalities concerned will be revisited.

This course is offered jointly by the Department of Forest Science and the Department of Recreation Administration, normally in the Spring or Summer terms. 14-16 students are permitted to enroll in this course each time it is offered.

LAKEHEAD UNIVERSITY

John W. Hanna
Dept. of Outdoor Recreation
Lakehead University
Thunder Bay, Ontario P7B-5E1
CANADA
(801) 345-2121 ext. 748

Interpretive Curriculum

The Outdoor Recreation degree program is devised to provide appropriate education and training in all aspects of Outdoor Recreation, one of the many facets of general Recreation. Presently, Lakehead University alone offers a degree program specializing in Outdoor Recreation. Other universities in Ontario and throughout Canada offer other facets of Recreation. The program is concerned with leisure pursuits of people as they relate to the opportunity to acquire competency in a variety of Outdoor Recreation skills and activities which depend on the natural environment. The course work is designed to enable the student to gain knowledge in: the organization, administration, and instruction of Outdoor Recreation areas and facilities; and the current thought, issues, and trends in the political, administrative, and philosophical aspects of Outdoor Recreation.

Interpretive Courses

First Course

Title: Outdoor Interpretation I

Course Description:
A half-course dealing with the history, theory, and philosophy of environmental interpretation. The course content relies heavily upon ecological principles, natural community concepts, and cyclical processes. Interesting natural history topics include plants, soils, water, birds, mammals, fish, and insects.

Second Course

Title: Outdoor Interpretation II

Course Description:
A half-course building upon base knowledge established in the previous course. Interpretive literature is extensively covered along with additional natural history topics including reptiles, amphibians, weather, flowers, and astronomy.

LAKEHEAD UNIVERSITY (continued)

Third Course

Title: Outdoor Interpretation III

Course Description:
A half-course dealing with interpreting the environment to the general public. Emphasis is placed upon: interpretive styles and principles; learning theory; multi-sensory orientation; and specifics such as guided walks and talks, campfire and evening programs, visitor information services, self-guided nature trails, and natural history exhibits.

Fourth Course

Title: Outdoor Interpretation IV

Course Description:
A half-year course emphasizing environmental issues relevant to the Northern Ontario region and the interpretation of these issues to the public. Topics include: industrial pollution; economic vs. ecologic growth; recycling; renewable and non-renewable resources; air, water, and land quality; transportation systems; packaging; and waste disposal. An individual planning project is required for each student.

SENECA COLLEGE

Jack Seigel
Seneca College of Applied Arts & Technology
1750 Finch Ave. E.
Willowdale, Ontario M2J 2X5
CANADA

Interpretive Curriculum

"Historical/Natural Interpretive Services" is designed to provide a general background in several resource fields, primarily the natural sciences and Canadian social history. Emphasis is placed on developing skills necessary to communicate this knowledge to the general public. These skills range from person-to-person communication techniques (such as creative writing and public speaking) to sophisti-cated audio-visual presentations and exhibits. The course also offers an insight into the history and philosophy of interpretive planning.

Since interpretation is not a field which can be studied through lecture material alone, the course also provides the maximum opportunity for student participation. Guest speakers and field trips to interpretive sites are planned, while workshop sessions and field placement allow students to gain field experience.

While students in the course usually spend four semesters on campus and work at an interpretive site during the summer between first and second years, those with university background may apply to complete the program in two semesters and specialize in either historical or natural interpretation.

An example curriculum for museum specialists follows:

Semester 1:
* Interpretation - Introduction
* Interpretation - Field Trips (1/2 credit)
* Interpretive Writing Workshop (1/2 credit)
* Photography
* Natural Science Interpretation & field studies
* Canadian Social History (pre-1867)

Semester 2:
* Interpretation - Planning and Programming
* Audio Visual
* Native Peoples
* Canadian Architecture
* elective

summer: three months' field work at a historic site or museum

SENECA COLLEGE (continued)

Semester 3:
* Museum Operation and Interpretation
* Introduction to Basic Conservation, Care, and Handling (1/2 credit)
* Design Workshop - Exhibits and Graphics (1/2 credit)
* Audio Visual
* Canadian Furniture and Historic Interiors
* elective
* Field Placement (80 hours)

Semester 4:
* Interpretation and Exhibit Workshop
* Introduction to Canadian ceramics, metals, glass, textiles, and costume
* Canadian Social History (post Confederation)
* Introduction to Canadian Art History
* elective
* Field Placement (80 hours)

An example curriculum for park specialists follows:

Semester 1:
* Interpretation - Introduction
* Interpretation - Field Trips (1/2 credit)
* Interpretive Writing Workshop (1/2 credit)
* Photography
* Natural Science Interpretation and Field Studies
* Canadian Social History (pre-1867)

Semester 2:
* Interpretation - Planning and Programming
* Audio Visual
* Native Peoples
* Natural Science
* elective

summer
* three months field work at a natural history site

Semester 3:
* Natural Science - Ecology
* Audio Visual
* Natural Science - Botany
* Natural Science - Field Studies (1/2 credit)
* Design Workshop - Exhibits and Graphics (1/2 credit)
* Field Placement (80 hours)

Semester 4:
* Natural Science - Ecology
* Physical Geography
* Interpretation and Exhibit Workshop
* Outdoor Recreation Skills
* elective
* Field Placement (80 hours)

SENECA COLLEGE (continued)

Interpretive Facilities

Seneca College's campus in York region is located on the former Eaton estate just north of King City. At Seneca's King campus, students have an opportunity to enjoy a magnificent natural setting that includes 696 acres of woods, fields, gardens, and a picturesque lake.

TRENT UNIVERSITY

J.S. Marsh, Chairman
Environmental and Resource Studies
Environmental Center
Trent University
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CANADA
(705) 748-1636

Interpretive Curriculum

The B.A., B.S., and M.S. degrees in Environmental Studies are offered at Trent University. Trent University is a small university devising individual courses and honors programs according to academic aims and student interests. (Trent University also hosts regular workshops pertaining to interpretation, and also publish Park News, Alternatives, and Ecology Bulletin.)

Interpretive Facilities

Given the interdisciplinary nature of the Program, facilities for environmental teaching and research such as laboratories, lecture rooms, the library and computer center are located in various parts of the university; however, the focus of activity is the new Environmental Center. The university has an extensive campus and nature sanctuary affording opportunities for environmental research, planning, and interpretation. In addition, opportunities exist to work in interpretation with agencies in the local area such as Parks Canada, Provincial Parks, Conservation Authorities, zoos, museums, and historic sites.

Interpretive Course

First Course

Title: Honors Thesis
Texts: Sharpe; Edwards.

Course Description:
A special topics course designed to allow honors students in Environmental Studies and Geography to develop understanding of, and skills in, environmental and heritage interpretation. Approximately one senior majoring in Geography or Environmental Studies enrolls in this course each term.

Course Requirements:
Major research paper, thesis, and annotated bibliography.

TRENT UNIVERSITY (continued)

Second Course

Title: Special Topics in Heritage Interpretation

Graduate Studies

Beginning in 1984 opportunities are likely to exist to pursue graduate work in interpretation through the new Centre for Canadian Heritage and Development Studies.

UNIVERSITY OF GUELPH

Alan P. Watson
University of Guelph Aboretum
Guelph, Ontario N1G 2W1
CANADA
(519) 824-4120 ext. 3932

Interpretive Curriculum

The B.S., M.S., and Ph.D. degrees are offered at the University of Guelph. Required courses include: Plant Biology or The Plant Kingdom; The Animal Kingdom; and Ecology or Ecology and Man.

Interpretive Facilities

At the University of Guelph Arboretum: Nature Center, self-guiding interpretive nature trails. Nearby: Royal Botanical Gardens, 4 conservation areas, Royal Ontario Museum, Ontario Science Center. Within 200km radius: Provincial Parks with interpretive programs.

Interpretive Course

Title: Nature Interpretation
Hours: 2 lecture, 3 lab hours per week (13 week semester)
Texts: Van Meter (a&b); Nature Trails.

Course Description:

The lectures offer a detailed introduction to applied natural history by means of a study of the philosophies which support it, the various levels at which it is offered, and the methods by which it is carried out. Emphasis is placed on the investigation of the techniques of natural history interpretation which presently exist and the ways in which these can be improved, and the thematic nature of interpretation and how this is manipulated to be applied to different user groups. The laboratory periods provide students with a familiarity of the local flora and fauna as well as an insight into nature interpretation, resource requirements, and policy development. Approximately 18 students (20% sophomores, 15% juniors, 60% seniors, and 5% graduate students) majoring in Wildlife (60%), Biology (20%), Parks and Recreation (10%), and Landscape Architecture (10%) enroll in this course each semester.

Course Requirements:

Trail guide for one of the aboretum's self-guiding trails; display on any natural history theme; 1-hour interpretive presentation including a report on chosen interpretive techniques, program pacing, objectives and a program summary; midterm exam; and final exam.

UNIVERSITY OF WATERLOO

Paul F.J. Eagles
Department of Recreation
University of Waterloo
Waterloo, Ontario N2L 3G1
CANADA
(519) 885-1211

Interpretive Curriculum

The B.A. and M.A. degrees in Recreation are offered at the University of Waterloo. Forty-four term courses are required for the Honors degree in Recreation. The student begins study in one of the four areas of concentration available (Leisure Studies, Therapeutic Recreation, Recreation Administration, and Outdoor Recreation) in the second year of the program. Joint Honors programs with Geography, Man-Environment Studies, Sociology, and Kinesiology have been developed. A Business option is also offered.

Interpretive Facilities

Ecology lab, outdoor recreation lab, cartography lab, media lab, computer facilities, and 4 nature centers within 30 miles.

Interpretive Course

First Course

Title: Interpretation
Hours: 4 hours per week
Texts: Book; Sharpe; Tilden.

Course Description:
Concepts, philosophy, and practices of interpretation relative to understanding the use of the natural environment. Approximately 25 students (juniors and seniors) majoring in Recreation and Parks (70%) and Environmental Studies (30%) enroll in this course each semester.

Course Requirements:
Lab assignments, 4 field trips and reports on each trip, and a final exam are required.

UNIVERSITY OF WATERLOO (continued)

Second Course

Title: Outdoor Education in Recreation
Texts: Ford; Link; Manly.

Course Description:

The present status of outdoor education in modern society; government functions and policies related to outdoor education services; the planning and administration of outdoor education activities. Current problems. The course combines both the theory and practice of outdoor education. The lecture material will concentrate on the theory behind the field, the experience of others and the program delivery. The two laboratory assignments will give the student an opportunity to learn and investigate nature in winter. Each student will prepare and present a seminar. These will enable each person to gain experience in material presentation and will cover many applied program situations.

Course Requirements:

Two laboratory reports, seminar presentation and paper, participation in class and discussion, and midetrm and final examinations.

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